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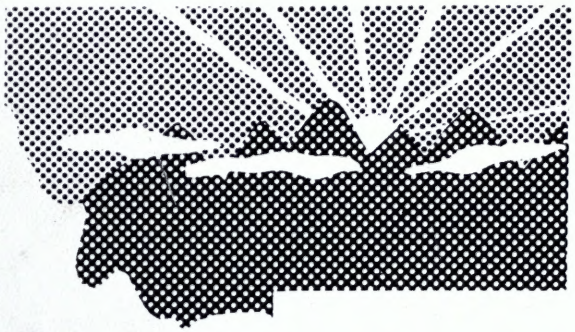

• VITAL INFORMATION FOR EDUCATION AND WORK •

Department of Vocational and Occupational Education
Office of Public Instruction
Georgia Ruth Rice, Superintendent
Helena, Montana 59601

The printing of these VIEWscripts was paid for by the Montana State Occupational Information Coordinating Committee

ALPHABETICAL LISTING OF VIEWSCRIPTS

Script No.	Title	D.O.T. No.	Script No.	Title	D.O.T. No.
1	Accountant (CPA)	160.167-010	37	Baker's Helper	526.686-010
2	Accountant-Junior	160.167-010	38	Bank Operation Trainee	186.267-018
3	Accounting Clerk	216.482-010	39	Bank Reconciliation Clerk	216.382-018
4	Administrative Aide	169.167-010	40	Barber	330.371-010
5	Adv. Layout Artist	141.061-022	41	Bartender	312.474-010
6	Aerial Applicator-Crop	196.263-010	42	Bellhop	324.677-010
7	Ag Chemical Fieldperson	040.061-010	43	Bill Collector	241.367-010
8	Ag Chemical Sales Rep.	262.357-010	44	Billing Typist	214.382-014
9	Agricultural Inspector	168.287-010	45	Biologist	041.061-030
10	Ag Lab Tester	029.261-010	46	Boilermaker	805.281-014
11	Air Cond/Refrig. Mech.	637.261-026	47	Bookkeeper	210.382-014
12	Aircraft Fuel Service	915.467-010	48	Bookkeeping Mach. Operator	210.382-022
13	Airframe/Power Pl Mech.	621.281-014	49	Border Patrol Agent	375.363-010
14	Air Hammer Operator	869.687-026	50	Brake & Front End Spec.	620.281-026
15	Airline Pilot	196.263-014	51	Bricklayer	861.381-018
16	Air Traffic Controller	193.162-018	52	Building Construction Insp.	182.267-010
17	All-Around Butcher	525.381-014	53	Building Supply Sales Asst.	279.357-054
18	Ambulance Driver	913.683-010	54	Bulldozer Operator	850.683-010
19	Anesthesiologist	070.101-010	55	Bus Driver	913.463-010
20	Apartment Manager	186.167-018	56	Buyer	162.157-018
21	Appliance Service	827.261-010	57	Cabinetmaker	660.280-010
22	Architect	001.061-010	58	Cable Splicer	829.361-010
23	Arch. Drafter	001.261-010	59	Cafeteria Cook	313.381-030
24	Artificial Inseminator	418.384-010	60	Car Rental Agent	295.477-010
25	Asbestos/Insulating Wkr.	863.381-014	61	Carpenter	860.381-022
26	Auctioneer	294.257-010	62	Cartographic Drafter	018.261-010
27	Audiologist	076.101-010	63	Cashier	211.462-010
28	Audit Clerk	210.382-010	64	Catalog Order Clerk	249.367-054
29	Auto Body Repair	807.381-010	65	Cement Mason	899.364-010
30	Auto Mechanic	620.261-010	66	Chemical Engineer	008.061-018
31	Auto Parts Salesperson	279.357-062	67	Chemical Lab Tech	022.261-010
32	Automobile Salesperson	273.353-010	68	Child Day Care Center Wkr.	359.677-018
33	Auto Trans. Specialist	620.281-062	69	Chiropractor	079.101-010
34	Auto Upholsterer	780.381-010	70	Civil Engineer	005.061-014
35	Bagger (Grocery)	920.687-014	71	Civil Eng. Tech.	005.061-014
36	Baker	526.381-010	72	Claims Adjuster	241.217-010

Script No.	Title	D.O.T. No.
73	Claims Clerk	241.362-010
74	Classified Ad Clerk	247.367-010
75	Clergy	120.007-010
76	Clerk-Typist	203.362-010
77	Coin Machine Mechanic	639.281-014
78	Collection Clerk	241.357-010
79	College Instructor	090.227-010
80	Compositor	973.381-010
81	Computer Operator	213.362-010
82	Computer Programmer	020.187-010
83	Const. Equip. Mech.	620.261-022
84	Construction Worker	869.664-014
85	Control Room Tech.	194.282-010
86	Cooks and Chefs	313.131-014
87	Copywriter	132.067-014
88	Cosmetics Demonstrator	297.354-010
89	Cosmetologist	332.271-010
90	Counter Attendant	369.477-014
91	Court Reporter	202.362-010
92	Credit Analyst	191.267-014
93	Credit Clerk	205.367-022
94	Credit Manager	168.167-054
95	Custodian	382.664-010
96	Dairy Equipment Repair	629.281-018
97	Dairy Farm Worker	410.684-010
98	Dairy Helper	529.686-026
99	Dairy Herder	410.131-018
100	Dairy Herd Tester	410.357-010
101	Darkroom Technician	976.681-010
102	Data Equip. Installer	828.281-010
103	Dental Assistant	079.371-010
104	Dental Hygienist	078.361-010
105	Dental Lab Technician	712.381-018
106	Dentist	072.101-010
107	Detective	375.267-010
108	Diesel Mechanic	625.281-010
109	Dietary Aide	077.121-010
110	Dining Room Attendant	311.677-010
111	Dining Rm Host/Hostess	310.137-010
112	Dishwasher	318.687-010
113	Dispensing Optician	713.361-014
114	Displayer, Merchandiser	298.081-010
115	Drafter	017.261-026
116	Drapery Seamstress	787.682-018
117	Driver, Milk Route	292.353-010
118	Drycleaner	362.382-014
119	Duplicating Machine Oper.	207.682-018
120	EEG Technician	078.367-022
121	Egg Ranch Manager	411.131-010
122	Electric Sign Repairer	824.281-018
123	Electrical Engineer	003.061-010
124	Electrical Repairperson	829.281-014
125	Electrician	824.261-010
126	Electrocardiograph Tech.	078.362-018
127	Embalmer	338.371-014
128	Escrow Officer	119.367-010
129	Exterminator	389.684-010
130	Farm & Garden Equip. Sales	272.357-014
131	Farm Machine Operator	409.683-010
132	Farm Real Estate Sales	250.357-018
133	Farm Worker, General	421.683-010
134	Feed Company Fieldperson	096.127-018
135	Feed Mill Operator	520.685-178
136	File Clerk	206.362-010
137	Film Library Clerk	222.367-026
138	Finance Company Mgr.	186.117-038
139	Firefighter	373.364-010
140	Flagger, Crop Dusting	409.607-010
141	Flight Attendant	352.367-010
142	Flight Service Spec.	193.162-014
143	Floor Covering Install.	864.481-010
144	Floor Covering Sales	270.357-026
145	Floral Designers	142.081-010
146	Florist	142.081-010
147	Forester (Professional)	040.061-034
148	Forestry Technician	452.364-010

Script No.	Title	D.O.T. No.
149	Forklift Driver	921.683-050
150	Frame Man, Tele. Ind.	822.684-010
151	Funeral Director	187.167-030
152	Furnace Installer	862.361-010
153	Furniture Salesperson	270.357-030
154	Furniture Upholsterer	780.381-018
155	Game Warden	379.167-010
156	Garbage Collector	909.687-010
157	Geologist	024.061-018
158	Glazier	865.381-010
159	Graphic Designer	141.061-018
160	Grocery Checker	211.462-014
161	Groundskeeper	406.684-014
162	Guard (Security)	372.667-034
163	Hardware Sales	279.357-050
164	Heavy Equipment Operator	859.683-010
165	Helicopter Pilot	196.263-038
166	Highway Patrol Officer	375.263-018
167	Hod Carrier	869.687-026
168	Hospital Admitting Clerk	205.137-010
169	Hospital Cashier	211.362-010
170	Hotel Clerk	238.362-010
171	Hotel-Motel Manager	187.117-038
172	Housekeeping Aide	323.687-101
173	Ice Cream Machine Operator	529.482-014
174	Information Operator	235.662-018
175	Insurance Adjuster	241.217-010
176	Insurance Agent	250.257-010
177	Interior Designer/Decorator	142.051-014
178	Juvenile Officer	375.367-010
179	Keypunch Operator	203.582-030
180	Kitchen Helper	318.687-010
181	Lab Assistant	078.381-010
182	Lab Helper, Asst.	381.687-022
183	Laborer, General	862.684-014
184	Lather	842.361-010
185	Laundry Worker	361.685-018
186	Lawyer	110.107-010
187	Legal Secretary	201.362-010
188	Lens Grinder	716.382-018
189	Librarian	100.127-014
190	Library Assistant	249.367-046
191	Licensed Practical Nurse	079.374-014
192	Line Maintainer	821.261-014
193	Lithographic Operator	651.482-010
194	Locksmith	709.281-010
195	Lumber Grader	669.587-010
196	Machinist	600.280-022
197	Mail Carrier	230.367-010
198	Maintenance Mechanic	638.281-014
199	Maintenance Repairer	899.381-010
200	Makeup Arranger	973.381-026
201	Meat Cutter	316.684-018
202	Medical Assistant	079.367-010
203	Medical Lab Tech	078.381-014
204	Medical Records Adm.	079.167-014
205	Medical Records Clerk	245.362-010
206	Medical Technologist	078.361-014
207	Messenger	230.667-010
208	Metallurgist	011.061-018
209	Meter Reader	209.567-010
210	Milker, Machine	410.685-010
211	Millwright	638.281-018
212	Mining Engineer	010.061-014
213	Model	297.667-014
214	Motion Picture Projectionist	960.362-010
215	Motorcycle Mechanic	620.281-054
216	Multilith Operator	651.682-014
217	Music Therapist	076.127-014
218	New Account Clerk	205.362-026
219	New Car Get Ready Mechanic	806.361-026
220	Note Teller	211.362-026
221	Nurse Aide	355.674-014
222	Nurse, LPN	079.374-014
223	Nurse, RN	075.374-010
224	Nursery Laborer	405.687-014

Script No.	Title	D.O.T. No.
225	Nursery Laborer	405.687-014
226	Occupational Therapist	076.121-010
227	Occupation Therapy Asst.	355.377-010
228	Office Clerk	209.562-010
229	Office Machine Service	633.281-018
230	Operating Engineer	859.683-010
231	Operating Room Tech.	079.374-022
232	Optical Bench Wkr.	716.280-014
233	Optometrist	079.101-018
234	Orderly	355.674-018
235	Orthodontist	072.101-022
236	Painter	840.381-010
237	Paperhanger	841.381-010
238	Park Ranger	169.167-042
239	Parking Enforcement Officer	375.587-010
240	Parking Lot Attendant	915.473-010
241	Patternmaker	781.381-026
242	PBX Operator	235.662-022
243	Pediatrician	070.101-066
244	Personnel Manager	166.117-018
245	Pharmacist	074.161-010
246	Pharmacy Helper	074.387-010
247	Photographer	143.062-030
248	Photo Retouch Artist	970.281-018
249	Photojournalist	143.062-034
250	Physical Therapist	076.212-014
251	Physical Therapy Asst.	355.354-010
252	Physician	070.101-022
253	Planning Aide (Urban Planner)	199.364-010
254	Plasterer	842.361-018
255	Plumber	862.381-030
256	Police Aides	243.362-014
257	Police Officer	375.263-014
258	Postal Clerk	243.362-014
259	Poultry Dresser	525.687-070
260	Poultry Farmworker	411.584-010
261	Pressers	363.682-014
262	Printer	651.380-010
263	Professional Athlete	153.341-010
264	Proof Machine Operator	217.382-010
265	Prosthetist-Orthotist	078.261-022
266	Psychiatric Aide	355.377-014
267	Psychologist	045.067-014
268	Public Relations Rep.	165.067-010
269	Pump Servicer	630.281-018
270	Purchasing Agent	162.157-038
271	Radio/TV Announcer	159.147-010
272	Radio Dispatcher	379.362-010
273	Radio/TV Repairer	720.281-018
274	Radiologic Tech (X-Ray)	078.362-026
275	Radiologist	070.101-090
276	Railroad Worker	910.363-014
277	Real Estate Appraiser	191.267-010
278	Real Estate Sales/Agent	250.357-018
279	Receptionist	237.367-038
280	Reporter	131.267-018
281	Respiratory Therapist	079.367-010
282	Restaurant Manager	187.167-106
283	Roofer	866.381-010
284	Route Driver	292.353-010
285	Sales Clerk	290.477-014
286	School Bus Driver	913.463-010
287	Seamstress	785.261-014
288	Secretary, General	201.362-030
289	Securities Sales	251.157-010
290	Service Station Attendant	915.467-010
291	Service Writer	620.261-018
292	Sheet Metal Worker	804.281-010
293	Sheriff's Deputy	377.263-010
294	Ship/Receive Clerk	222.387-050
295	Shoe Repairer	365.361-014
296	Shoe Sales Asst.	261.357-062
297	Sign Painters	970.381-026
298	Small-Appliance Repairer	723.381-010
299	Social Worker	195.107-010
300	Sociologist	054.067-014

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4	Administrative Aide	169.167-010	40	Barber	330.371-010
5	Adv. Layout Artist	141.061-022	41	Bartender	312.474-010
6	Aerial Applicator-Crop	196.263-010	42	Bellhop	324.677-010
7	Ag Chemical Fieldperson	040.061-010	43	Bill Collector	241.367-010
8	Ag Chemical Sales Rep.	262.357-010	44	Billing Typist	214.382-014
9	Agricultural Inspector	168.287-010	45	Biologist	041.061-030
10	Ag Lab Tester	029.261-010	46	Boilermaker	805.281-014
11	Air Cond/Refrig. Mech.	637.261-026	47	Bookkeeper	210.382-014
12	Aircraft Fuel Service	915.467-010	48	Bookkeeping Mach. Operator	210.382-022
13	Airframe/Power Pl Mech.	621.281-014	49	Border Patrol Agent	375.363-010
14	Air Hammer Operator	869.687-026	50	Brake & Front End Spec.	620.281-026
15	Airline Pilot	196.263-014	51	Bricklayer	861.381-018
16	Air Traffic Controller	193.162-018	52	Building Construction Insp.	182.267-010
17	All-Around Butcher	525.381-014	53	Building Supply Sales Asst.	279.357-054
18	Ambulance Driver	913.683-010	54	Bulldozer Operator	850.683-010
19	Anesthesiologist	070.101-010	55	Bus Driver	913.463-010
20	Apartment Manager	186.167-018	56	Buyer	162.157-018
21	Appliance Service	827.261-010	57	Cabinetmaker	660.280-010
22	Architect	001.061-010	58	Cable Splicer	829.361-010
23	Arch. Drafter	001.261-010	59	Cafeteria Cook	313.381-030
24	Artificial Inseminator	418.384-010	60	Car Rental Agent	295.477-010
25	Asbestos/Insulating Wkr.	863.381-014	61	Carpenter	860.381-022
26	Auctioneer	294.257-010	62	Cartographic Drafter	018.261-010
27	Audiologist	076.101-010	63	Cashier	211.462-010
28	Audit Clerk	210.382-010	64	Catalog Order Clerk	249.367-054
29	Auto Body Repair	807.381-010	65	Cement Mason	899.364-010
30	Auto Mechanic	620.261-010	66	Chemical Engineer	008.061-018
31	Auto Parts Salesperson	279.357-062	67	Chemical Lab Tech	022.261-010
32	Automobile Salesperson	273.353-010	68	Child Day Care Center Wkr.	359.677-018
33	Auto Trans. Specialist	620.281-062	69	Chiropractor	079.101-010
34	Auto Upholsterer	780.381-010	70	Civil Engineer	005.061-014
35	Bagger (Grocery)	920.687-014	71	Civil Eng. Tech.	005.061-014
36	Baker	526.381-010	72	Claims Adjuster	241.217-010

Script No.	Title	D.O.T. No.
73	Claims Clerk	241.362-010
74	Classified Ad Clerk	247.367-010
75	Clergy	120.007-010
76	Clerk-Typist	203.362-010
77	Coin Machine Mechanic	639.281-014
78	Collection Clerk	241.357-010
79	College Instructor	090.227-010
80	Compositor	973.381-010
81	Computer Operator	213.362-010
82	Computer Programmer	020.187-010
83	Const. Equip. Mech.	620.261-022
84	Construction Worker	869.664-014
85	Control Room Tech.	194.282-010
86	Cooks and Chefs	313.131-014
87	Copywriter	132.067-014
88	Cosmetics Demonstrator	297.354-010
89	Cosmetologist	332.271-010
90	Counter Attendant	369.477-014
91	Court Reporter	202.362-010
92	Credit Analyst	191.267-014
93	Credit Clerk	205.367-022
94	Credit Manager	168.167-054
95	Custodian	382.664-010
96	Dairy Equipment Repair	629.281-018
97	Dairy Farm Worker	410.684-010
98	Dairy Helper	529.686-026
99	Dairy Herder	410.131-018
100	Dairy Herd Tester	410.357-010
101	Darkroom Technician	976.681-010
102	Data Equip. Installer	828.281-010
103	Dental Assistant	079.371-010
104	Dental Hygienist	078.361-010
105	Dental Lab Technician	712.381-018
106	Dentist	072.101-010
107	Detective	375.267-010
108	Diesel Mechanic	625.281-010
109	Dietary Aide	077.121-010
110	Dining Room Attendant	311.677-010
111	Dining Rm Host/Hostess	310.137-010
112	Dishwasher	318.687-010
113	Dispensing Optician	713.361-014
114	Displayer, Merchandiser	298.081-010
115	Drafter	017.261-026
116	Drapery Seamstress	787.682-018
117	Driver, Milk Route	292.353-010
118	Drycleaner	362.382-014
119	Duplicating Machine Oper.	207.682-018
120	EEG Technician	078.367-022
121	Egg Ranch Manager	411.131-010
122	Electric Sign Repairer	824.281-018
123	Electrical Engineer	003.061-010
124	Electrical Repairperson	829.281-014
125	Electrician	824.261-010
126	Electrocardiograph Tech.	078.362-018
127	Embalmer	338.371-014
128	Escrow Officer	119.367-010
129	Exterminator	389.684-010
130	Farm & Garden Equip. Sales	272.357-014
131	Farm Machine Operator	409.683-010
132	Farm Real Estate Sales	250.357-018
133	Farm Worker, General	421.683-010
134	Feed Company Fieldperson	096.127-018
135	Feed Mill Operator	520.685-178
136	File Clerk	206.362-010
137	Film Library Clerk	222.367-026
138	Finance Company Mgr.	186.117-038
139	Firefighter	373.364-010
140	Flagger, Crop Dusting	409.607-010
141	Flight Attendant	352.367-010
142	Flight Service Spec.	193.162-014
143	Floor Covering Install.	864.481-010
144	Floor Covering Sales	270.357-026
145	Floral Designers	142.081-010
146	Florist	142.081-010
147	Forester (Professional)	040.061-034
148	Forestry Technician	452.364-010

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149	Forklift Driver	921.683-050
150	Frame Man, Tele. Ind.	822.684-010
151	Funeral Director	187.167-030
152	Furnace Installer	862.361-010
153	Furniture Salesperson	270.357-030
154	Furniture Upholsterer	780.381-018
155	Game Warden	379.167-010
156	Garbage Collector	909.687-010
157	Geologist	024.061-018
158	Glazier	865.381-010
159	Graphic Designer	141.061-018
160	Grocery Checker	211.462-014
161	Groundskeeper	406.684-014
162	Guard (Security)	372.667-034
163	Hardware Sales	279.357-050
164	Heavy Equipment Operator	859.683-010
165	Helicopter Pilot	196.263-038
166	Highway Patrol Officer	375.263-018
167	Hod Carrier	869.687-026
168	Hospital Admitting Clerk	205.137-010
169	Hospital Cashier	211.362-010
170	Hotel Clerk	238.362-010
171	Hotel-Motel Manager	187.117-038
172	Housekeeping Aide	323.687-101
173	Ice Cream Machine Operator	529.482-014
174	Information Operator	235.662-018
175	Insurance Adjuster	241.217-010
176	Insurance Agent	250.257-010
177	Interior Designer/Decorator	142.051-014
178	Juvenile Officer	375.367-010
179	Keypunch Operator	203.582-030
180	Kitchen Helper	318.687-010
181	Lab Assistant	078.381-010
182	Lab Helper, Asst.	381.687-022
183	Laborer, General	862.684-014
184	Lather	842.361-010
185	Laundry Worker	361.685-018
186	Lawyer	110.107-010
187	Legal Secretary	201.362-010
188	Lens Grinder	716.382-018
189	Librarian	100.127-014
190	Library Assistant	249.367-046
191	Licensed Practical Nurse	079.374-014
192	Line Maintainer	821.261-014
193	Lithographic Operator	651.482-010
194	Locksmith	709.281-010
195	Lumber Grader	669.587-010
196	Machinist	600.280-022
197	Mail Carrier	230.367-010
198	Maintenance Mechanic	638.281-014
199	Maintenance Repairer	899.381-010
200	Makeup Arranger	973.381-026
201	Meat Cutter	316.684-018
202	Medical Assistant	079.367-010
203	Medical Lab Tech	078.381-014
204	Medical Records Adm.	079.167-014
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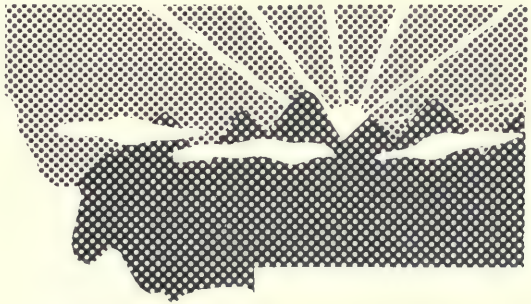
207	Messenger	230.667-010
208	Metallurgist	011.061-018
209	Meter Reader	209.567-010
210	Milker, Machine	410.685-010
211	Millwright	638.281-018
212	Mining Engineer	010.061-014
213	Model	297.667-014
214	Motion Picture Projectionist	960.362-010
215	Motorcycle Mechanic	620.281-054
216	Multilith Operator	651.682-014
217	Music Therapist	076.127-014
218	New Account Clerk	205.362-026
219	New Car Get Ready Mechanic	806.361-026
220	Note Teller	211.362-026
221	Nurse Aide	355.674-014
222	Nurse, LPN	079.374-014
223	Nurse, RN	075.374-010
224	Nursery Laborer	405.687-014

Script No.	Title	D.O.T. No.
225	Nursery Laborer	405.687-014
226	Occupational Therapist	076.121-010
227	Occupation Therapy Asst.	355.377-010
228	Office Clerk	209.562-010
229	Office Machine Service	633.281-018
230	Operating Engineer	859.683-010
231	Operating Room Tech.	079.374-022
232	Optical Bench Wkr.	716.280-014
233	Optometrist	079.101-018
234	Orderly	355.674-018
235	Orthodontist	072.101-022
236	Painter	840.381-010
237	Paperhanger	841.381-010
238	Park Ranger	169.167-042
239	Parking Enforcement Officer	375.587-010
240	Parking Lot Attendant	915.473-010
241	Patternmaker	781.381-026
242	PBX Operator	235.662-022
243	Pediatrician	070.101-066
244	Personnel Manager	166.117-018
245	Pharmacist	074.161-010
246	Pharmacy Helper	074.387-010
247	Photographer	143.062-030
248	Photo Retouch Artist	970.281-018
249	Photojournalist	143.062-034
250	Physical Therapist	076.212-014
251	Physical Therapy Asst.	355.354-010
252	Physician	070.101-022
253	Planning Aide (Urban Planner)	199.364-010
254	Plasterer	842.361-018
255	Plumber	862.381-030
256	Police Aides	243.362-014
257	Police Officer	375.263-014
258	Postal Clerk	243.362-014
259	Poultry Dresser	525.687-070
260	Poultry Farmworker	411.584-010
261	Pressers	363.682-014
262	Printer	651.380-010
263	Professional Athlete	153.341-010
264	Proof Machine Operator	217.382-010
265	Prosthetist-Orthotist	078.261-022
266	Psychiatric Aide	355.377-014
267	Psychologist	045.067-014
268	Public Relations Rep.	165.067-010
269	Pump Servicer	630.281-018
270	Purchasing Agent	162.157-038
271	Radio/TV Announcer	159.147-010
272	Radio Dispatcher	379.362-010
273	Radio/TV Repairer	720.281-018
274	Radiologic Tech (X-Ray)	078.362-026
275	Radiologist	070.101-090
276	Railroad Worker	910.363-014
277	Real Estate Appraiser	191.267-010
278	Real Estate Sales/Agent	250.357-018
279	Receptionist	237.367-038
280	Reporter	131.267-018
281	Respiratory Therapist	079.367-010
282	Restaurant Manager	187.167-106
283	Roofer	866.381-010
284	Route Driver	292.353-010
285	Sales Clerk	290.477-014
286	School Bus Driver	913.463-010
287	Seamstress	785.261-014
288	Secretary, General	201.362-030
289	Securities Sales	251.157-010
290	Service Station Attendant	915.467-010
291	Service Writer	620.261-018
292	Sheet Metal Worker	804.281-010
293	Sheriff's Deputy	377.263-010
294	Ship/Receive Clerk	222.387-050
295	Shoe Repairer	365.361-014
296	Shoe Sales Asst.	261.357-062
297	Sign Painters	970.381-026
298	Small-Appliance Repairer	723.381-010
299	Social Worker	195.107-010
300	Sociologist	054.067-014

Script No.	Title	D.O.T. No.	Script No.	Title	D.O.T. No.
301	Soil Conservationist	040.061-054			
302	Speech Pathologist	076.107-010			
303	Sporting Goods Sales	277.357-058			
304	Stationary Engineer	950.382-026			
305	Stenographer	202.362-014			
306	Stock Clerk	222.387-058			
307	Structural-Ironworker	801.361-014			
308	Surveyor Helper	018.167-034			
309	Swamper/Loader, Crop Dust.	409.667-010			
310	Tabulating Machine Oper.	213.682-010			
311	Tailor	785.261-014			
312	Tape Perforator (Typesetter)	203.582-062			
313	Taxi Driver	913.463-018			
314	Teacher, Elementary	092.227-010			
315	Teacher, Secondary	091.227-010			
316	Technical Illustrator	017.281-034			
317	Technical Writer	131.267-026			
318	Telephone Operator	235.462-010			
319	Telephone Service Rep.	239.367-010			
320	Telephone Equip. Inst.	822.381-010			
321	Telegraphic Operator	203.582-050			
322	Teller, Financial Company	211.362-018			
323	Theater Manager	187.167-154			
324	Ticket Agent	248.382-010			
325	Tire Recapper	750.685-014			
326	Title Examiner	119.287-010			
327	Tool and Die Maker	601.280-046			
328	Traffic Rate Clerk	214.362-038			
329	Travel Agent	252.157-010			
330	Truck Driver	906.683-022			
331	Typesetting Operator	650.582-018			
332	Veterinarian	073.101-010			
333	Waiter/Waitress	311.477-030			
334	Ward Clerk	245.362-014			
335	Warehouse Worker	922.687-058			
336	Watch Repairer	715.281-010			
337	Welder	819.384-010			
338	Writer, Technical Pub.	131.267-026			

MONTANA • VIEW



• VITAL INFORMATION FOR EDUCATION AND WORK •

Department of Vocational and Occupational Education
Office of Public Instruction
Georgia Ruth Rice, Superintendent
Helena, Montana 59601

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MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: ACCOUNTANT (CPA)

ACCOUNTANTS (CPAs) are accountants licensed by the state who are qualified to perform professional accounting services for businesses, government agencies and individuals. CPAs are at the top of their field.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Interest in working with numbers	Numerical	Generally good health
Ability to concentrate	Clerical	Normal vision (natural or corrected)
Preference to tangible, concrete activities		Normal use of arms, hands and fingers
Preference for working alone		Normal manual dexterity
Attention to detail		
Orderly habits		

YOU SHOULD KNOW THAT

- -a four-year college degree, successful completion of a difficult licensing exam, and experience in the field are required for CPA standing;
- -creativity is required in the successful CPA;
- -each accounting problem is different and requires differing applications of rules and laws in the field.

YOU MUST BE ABLE TO

- -write the English language clearly;
- -work more than the standard forty-hour work week at times and be willing to travel for several days at a time;
- -work alone, concentrating for long periods of time and on your own initiative;
- -explain completed accounting mechanics and requirements to clients to their satisfaction.

D.O.T. 160.167-010

PREPARATION AND TRAINING:

The certified public accountant must have a bachelor's degree, experience and successfully complete a difficult licensing examination given by the examiners of the State of Montana.

THE COURSE OF STUDY INCLUDES:

High School: a college preparatory program including mathematics, sciences and a foreign language should be taken.

College or university: a major in accounting or closely related business major with emphasis in accounting is recommended.

ADDITIONAL FACTS ABOUT TRAINING:

Following college graduation, most of those desiring to become CPAs find jobs as beginning accountants and work for some time gaining required practical experience before taking the difficult state licensing examination. The examination consists of several distinct parts. Few pass all parts of the test at one time. Because of the difficulty of the exam, some never qualify.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities for certified public accountants are good and expanding. Opportunities for accounting positions (other than CPAs) are also good for college graduates with better than average grades or aptitudes.

ADVANCEMENT

Certified public accountants in public practice usually advance within a few years with a firm to a partnership or near partnership position with administrative as well as accounting duties. Some enter business for themselves after gaining experience. Certified public accountants employed by government agencies of various types move up through Civil Service Systems to middle and top level positions with several years experience.

MORE ABOUT THE JOB:

There are two basic kinds of work performed by certified public accountants, private accounting and public accounting. Accountants, who do private accounting work for a business or government agency, perform accounting tasks on the financial matters of the employer. Those in public accounting, members of accounting firms, perform accounting work for clients in business and government on a fee basis.

Specific areas of accounting and their concerns are:

Budget: estimating expenditures, developing and supervising budget systems and analyzing trends in cost for management;

Cost: using accounting and statistical techniques to analyze specific costs, depreciation, wages, raw materials and others;

Machine processing: adapting and supervising the procedures used in accounting to electronic and other machines;

Tax: computation of taxes based on knowledge of laws, exemptions and various regulations, and advising clients or management on correct procedures relative to tax problems.

JOB CLUSTER #2

"Business and Office"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$700-1,500	$800-1,000	$700

Starting range and usual starting salary apply to college or university graduates entering the field before certification. With the total of three to five years total experience and the achievement of the status certified public accountant, the worker should be in the "most workers earned" category.

HOURS OF WORK

Most certified public accountants work a standard forty-hour week, though overtime is routine during the first four months of each year because of tax business. Some night and weekend work may be expected in meeting deadlines.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

paid vacations and holidays
sick leave
retirement plan
group insurance
profit sharing plans

VV10579

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Contact a local CPA or accounting firm for further details.

ADDITIONAL SOURCES OF INFORMATION:

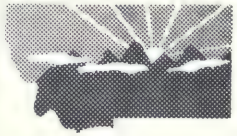
Your school counselor and librarian may also help you find additional information

Accounting Careers Council
National Distribution Center
P. O. Box 650
Radio City Station
New York, New York 10019

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Auditor	160.162-014
Credit analyst	160.267-010
International auditor (pvt.firm)	160.167-034
Tax auditor - federal & state	160.167-038
Cost accountant	160.167-018

D.O.T. Fourth Edition, page 91



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: ACCOUNTANT (JUNIOR)

The ACCOUNTANT (JUNIOR) performs general, cost, and special accounting duties under varying degrees of supervision. Inexperienced accountants usually begin with fairly routine work, such as counting cash, verifying computations, or tracing entries from general ledger to books of original entry.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Accurate	Numerical	Normal vision and hearing (natural or corrected)
Courteous	Clerical	Eye-hand coordination
Tactful	Spatial	
High integrity	Intelligent	
Concern for detail		
Able to work with others		

YOU SHOULD KNOW THAT

Most public accounting offices hire either accounting clerks for routine duties or college trained staff accountants for more advanced work.
You may have to work evening shifts and weekends as a beginner and during peak months.
You will work for long periods while sitting.

YOU MUST BE ABLE TO

Use calculating machine, adding machine, and typewriter;
Use eyes constantly;
Display intense concentration;
Be accurate with figures;
Work under pressure during peak months.

D.O.T. 160.167-010

PREPARATION AND TRAINING:

A minimum of four years of college is usually required. Training can be obtained in four-year colleges, accounting and private business schools. A bachelor degree with a major in accounting or a closely related field is usually required.

RECOMMENDED HIGH SCHOOL SUBJECTS:

Mathematics	Business Machines	Speech
Algebra	English	Bookkeeping

COURSE OF STUDY AFTER HIGH SCHOOL:

Bookkeeping	Commercial Law	Business Machines
Accounting Principles	Mathematics	Psychology
Auditing	Economics	Taxation
Cost Accounting	Finance	

ADDITIONAL FACTS ABOUT TRAINING:

Opportunity for advancement is limited unless one completes additional training to become staff accountant. Those with inadequate academic preparation are likely to be assigned to routine jobs and find themselves handicapped in obtaining promotion. Some colleges offer internship programs for students to work part-time in business firms.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities are greatest in private business and industrial firms. There are some openings for accountants throughout the state.

OPPORTUNITIES FOR ADVANCEMENT

Junior accountants usually advance to semi-senior positions in one or two years. Lines of promotion vary. When junior accountant has sufficient experience and additional schooling, he/she may earn promotion to:

Accountant	Controller	Budget Officer
Purchasing Agent	Office Manager	Credit Manager
Other Executive Position		

MORE ABOUT THE JOB:

The primary job of the junior accountant is to prepare financial reports, such as profit and loss statements, balance sheets, and cost studies. These reports tell management how successful operations have been during the past accounting period.

In industry or private accounting, the junior accountant:
- assists in the preparation of ledger entries, insurance costs, and estimated liabilities;
- interprets reports and other data;
- does time keeping;
- posts accounts receivable and payable;
- assists with physical inventories of materials, parts, and equipment.

In public accounting, the junior accountant:
- assists in the audit of books and records of various business enterprises;
- may trace entries from general ledger to books of original entry;
- may assist in the preparation of financial statements, tax returns, and other reports.

In government agencies, junior accountants:
- assist in the preparation of financial statements and reports;
- prepare vouchers and fund transfer documents;
- make payroll and cost reports;
- assist in the supervision of clerical accounting functions;
- assist in the coordination of clerical accounting functions with data processing activities;
- assist with audits of government agencies and assessment districts.

JOB CLUSTER #2
"Business and Office"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	$12,000-23,000/yr		$12,000/yr

HOURS OF WORK

The normal workweek is forty hours, although accountants will probably be asked to work overtime and during rush seasons. Accountants may work day or evening shifts. You may be expected to work holidays and weekends at times.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

- health insurance
- retirement plan
- paid vacation
- sick leave
- paid holidays

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Check the yellow pages of the telephone book for accountants.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

AMERICAN INSTITUTE OF
CERTIFIED PUBLIC ACCOUNTANTS
505 Park Avenue
New York, NY 10022

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Auditor	160.162-014
Accountant, Cost	160.167-018
Accountant, Systems	160.167-026
Accountant, Tax	160.162-010

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: ACCOUNTING CLERK

ACCOUNTING CLERKS are skilled office workers who compute and calculate all types of financial and statistical information.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Dependability	Numerical	Good eyesight (natural or corrected)
Accuracy	Clerical	Good eye-hand coordination
Liking for routine work	Follow instructions well	
Neat appearance	Write and print clearly and accurately	
Attention to detail	Work for long periods of time on calculating, checking and verifying numbers	

YOU SHOULD KNOW THAT

- -working conditions are usually excellent with few hazards.
- -skilled accounting clerks can easily find employment with many public and private employers.
- -knowledge of the principles, procedures and terminology used in financial record keeping is a must.

YOU MUST BE ABLE TO

- -work for long periods of time with numbers verifying, checking and calculating.
- -write and print clearly and accurately.
- -follow written and spoken instructions exactly.
- -do some typing on the job.
- -operate standard office equipment.
- -make arithmetic calculations rapidly and accurately.

DOT 216.482-010

PREPARATION AND TRAINING:

You should be a high school graduate.

Helpful high school courses include mathematics, bookkeeping and typing.

When available, a vocational course in Business Education is recommended. The five vocational-technical centers offer this training.

Training in accounting is also available through private commercial colleges around the state.

You will be trained in special skills on the job.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities are usually good for accounting clerks because of increasing need for their services by office operations and high employee turnover.
Opportunities exist in all parts of the state but are greater in the large cities where businesses and government offices are located.

ADVANCEMENT

Promotion opportunities vary depending on the employer.
The chances for advancement within the field are good.
In Civil Service and with many private employers, those who learn more phases of office operation can advance to better paying, more responsible positions.
Most employees receive periodic pay raises.
For the skilled worker, there are chances to advance to more difficult and responsible jobs in the financial field and to become a supervisor of various record keeping or accounting services.

MORE ABOUT THE JOB:

The work of the accounting clerk will vary widely from job to job depending on the type of employer and the type of work the office performs. Some employers require office experience of beginning accounting clerks; however most will train inexperienced beginners if they have good school training.

Specific duties of the accounting clerk might include:

posting accounts receivable and payable;
computing income tax for payroll purposes;
handling bank deposits;
computing commissions on sales;
keeping records of statistical work;
recording and filing data processing tabulations;
compiling statistical and financial reports.

Some machines which the accounting clerk may be expected to operate include: typewriter, adding machines, calculators, comptometers, duplicating machines.

Accounting clerks may also be asked to perform duties not necessarily related to their skills, such as answering telephones and serving the public at counters.

JOB CLUSTER #2
"Business & Office"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$192-240/week	$165-200/week	$192/week

Salary figures assume you will meet all qualifications for accounting clerk. It may be that without additional training or work experience you will be hired as a Junior Accounting Clerk at a lower salary with the opportunity of advancing to Accounting Clerk after on the job training.

HOURS OF WORK

The normal workweek is forty hours, Monday through Friday. Overtime work is sometimes necessary but is not usual. Night and weekend work is rare.

FRINGE BENEFITS

Available depending on the place of employment are most or all of the following:

retirement programs
health insurance
sick leave
paid holidays
vacations

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

The employment service helps many young people find jobs. You may contact a youth representative at your local employment service office. Check in the index for the address of your local office.

ADDITIONAL SOURCES OF INFORMATION:

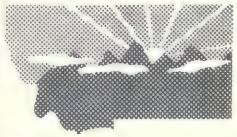
Your school counselor and librarian may also help you find additional information

OCCUPATIONAL OUTLOOK HANDBOOK, Section on Bookkeeping Workers and Accountants, published by the U.S. Department of Labor, Washington, D.C. 20402

Accounting Careers Council
National Distribution Center
P.O. Box 650
Radio City Station
New York, N.Y. 10019

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Statistical Clerk	216.382-062
Adding Machine Operator	216.482-014
Calculating Machine Operator	216.482-022



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: ADMINISTRATIVE AIDE

ADMINISTRATIVE AIDES perform a wide variety of duties to assist administrators and department heads of government and industry.

The ADMINISTRATIVE AIDE may also be known as Administrative Assistant or Administrative Officer. The latter two, however, are usually positions held by only the highly skilled and experienced.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Neat personal appearance	Ability to communicate effectively with others	Good general health
Ability to work closely with others or independently	Ability to "catch on" or to understand instructions	
Adaptability to change		
Decision-making abilities		

YOU SHOULD KNOW THAT

The Administrative Aide, as such, is usually found in government employment.
Private industry may delegate the same responsibilities to employees but under a different title as in the Bank Operations Officer Trainee.
The job title encompasses a great many duties which may range from routine coordination of office functions to making decisions.

YOU MUST BE ABLE TO

- work equally well under direct or general orders from supervising administrators
- evaluate work done by others and make recommendations for action
- accept responsibility for planning and carrying out programs developed by you or your supervisors.

DOT 169.167-010

PREPARATION AND TRAINING:

MINIMUM SCHOOLING

The completion of a two-year course in Business Administration is usually the minimum training accepted by employers. Many employers like to hire Administrative Aides with a four-year college degree, training them to move into more responsible management positions.

RECOMMENDED HIGH SCHOOL SUBJECTS

General business courses, typing, and clerical practices are recommended since the Administrative Aide will be dealing with office workers. English and public speaking are most valuable. Practical math should be included. Algebra and geometry, while not directly applicable, will help you develop reasoning skills. History and current events classes are also important.

COURSE OF STUDY AFTER HIGH SCHOOL

Most postsecondary schools offer programs in Business Administration. In addition to those which are part of the Business Administration major, you should take English, civics, sociology, psychology, and public speaking courses.

SPECIAL ENTRY REQUIREMENTS

Workers employed in government will be required to take a Civil Service examination. Private employers often require intelligence and aptitude tests.

ADDITIONAL FACTS ABOUT TRAINING

It is important to remember if you plan to specialize in a particular field of employment such as agriculture, courses in this field should also be taken. The Administrative Aide must know the functions of the government agency or business in which he/she plans to work.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

The long range employment trend for Administrative Aide looks promising both in government, where there has been a steady increase in the number of persons employed, and in business where there is an increasing demand for employees who can assume some of the day-to-day administrative functions of department heads.
Administrative Aides may be found in all areas of the country and in cities of all sizes but more openings exist in larger metropolitan areas.
Jobs may be found with city and county governments, with regional offices of state agencies and large business and industrial firms.

ADVANCEMENT

The Administrative Aide who has both ability and desire may easily advance to managerial positions.
With additional schooling and/or experience, the Administrative Aide may become an Administrative Officer, Operations Officer, Office Manager, or any one of many more responsible positions.

Advancement usually is by merit rather than seniority and is based on the Aide's ability to get the job done quickly and correctly.

MORE ABOUT THE JOB:

The Administrative Aide assists staff members and department heads by performing a wide variety of detailed duties related to administrative functions.

Depending on the place of employment, the Administrative Aide may perform some or all of the following tasks:

- coordinate office schedules
- gather data on assigned subjects and prepare preliminary reports
- manage budget and records preparation and control
- prepare correspondence
- supervise clerical staff
- under direction of department head, study ways of improving efficiency of routine office procedures
- help in preparing preliminary agenda for meetings of staff and make arrangements for meeting place

While Administrative Aides must be able to make decisions independently, their work is closely supervised by a department head or chief administrator. They handle much of the "leg work" for the administrator, gathering information or working on statistical data and performing tasks which are too time-consuming for the administrator to handle alone.

The Administrative Aide must be able to carry out and interpret orders by superiors and see that the office staff is carrying out orders relayed through that position.

The Aide must be able to work closely with other people and to have diplomacy and tact.

JOB CLUSTER #2
"Business & Office"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$800 - 1200+	$850-950	$800+

Salaries may vary from employer to employer depending on the responsibility the particular job requires. Check a local source for accurate salary information in your area.

HOURS OF WORK

The forty-hour workweek is standard. The Administrative Aide usually has an "8 to 5" job, but may work nights or weekends to complete special projects.

FRINGE BENEFITS

Depending on the place of employment, some or all of the following benefits may be available:

paid vacation	health insurance
sick leave	retirement plan
paid overtime	holidays

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Personnel offices of Federal, State and City/County Governments

ADDITIONAL SOURCES OF INFORMATION:

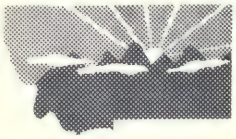
Your school counselor and librarian may also help you find additional information

American Management Association
135 West 50th Street
New York, NY 10020

International City Management Association
1140 Connecticut Ave. N.S.
Washington, D.C. 20036

RELATED OCCUPATIONS:

JOB TITLES:	D.O.T.#:
Administrative Analyst	169.167-010
Administrative Officer	169.167-010
Office Manager	169.167-034
Operations Officer	186.167-050 and 375.137-014
Administrative Secretary	169.167-014
Management Trainee	189.167-018
Manager, Administrative	169.167-034
General Manager	183.117-014 and 189.117-022



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB:

ADVERTISING LAYOUT ARTIST

The LAYOUT ARTIST creates the visual impact of an ad by selecting photographs, drawing illustrations or figures, and selecting the size or type of print to be used in a magazine or newspaper ad. When television commercials are planned, they usually sketch sample scenes for the client to consider.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Creative imagination	Attention to detail	Eye-hand coordination
Esthetic appreciation	Ability to work alone	Finger and manual dexterity
Artistic judgment concerning harmony of coloring lines	Perception of form and design	Average eyesight and hearing (natural or corrected)
	Color discrimination	
	Spatial aptitude	

YOU SHOULD KNOW THAT

-there is a great deal of competition pressure and hard work involved in the field of commercial art
-there is no room for the individual who cannot endure hard, demanding work
-the free lance layout artist faces the problem of uncertain income
-the advertising layout artist may at times have to abandon his/her desires for the advertiser who sometimes knows little about what constitutes good art

YOU MUST BE ABLE TO

-express yourself in words as well as art work
-convey ideas in conversation with clients
-accept ideas of others even though you do not approve of them
-perform tasks as a helper which may sometimes seem menial and uninteresting

DOT 141.061-022

PREPARATION AND TRAINING:

Artistic ability is the most important qualification to become a layout artist.

Helpful high school courses include art, English and history.

Limited training may be available in vocational school courses, home study courses, or on-the-job experience.

It is generally better for a person planning a career in commercial art to be professionally trained.

Students should be cautious in selecting an art school since standards vary.

SPECIAL ENTRY REQUIREMENTS:

Students must meet vocational skills necessary to become a commercial artist.

Students must meet general admission requirements for the school they wish to attend.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Jobs for layout workers are few, much sought after and open only to experienced, highly talented and creative artists.
Young people with only average ability and little specialized training will encounter stiff competition and will have limited opportunity for advancement.
Experience obtained working as layout artists will offer opportunities as free lance artists.

ADVANCEMENT

The advertising layout artist will sometimes advance in larger organizations to some managerial positions; he/she may also wish to work on their own and do work as a free lance artist.

MORE ABOUT THE JOB:

The advertising layout artist:

-designs advertising layouts for newspaper, magazine, television, poster, direct mail and billboard advertisements;
-studies illustrations and photographs submitted by clients or sketches illustrations following client's specifications to plan design layout;
-paints or draws comprehensive (sample of finished advertisements) for approval of client or other advertising personnel;
-arranges drawings or photographs in well-balanced artistic layout, deciding arrangement of size and style of type to be used from printed copy;
-suggests additions to or changes in advertising copy and design in final layout to improve presentation.

JOB CLUSTER #7

"Fine Arts and Humanities"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$12,500 - $17,500/annually		

Salaries may vary throughout the state or in other states. You may wish to check a local source for accurate salary information in the area of your choice.

HOURS OF WORK

The layout artist usually works an eight-hour day. Some overtime is required.

FRINGE BENEFITS

Depending on place and length of employment, you may receive:

retirement plan	paid vacation
sick leave	paid holidays

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

American Association of Advertising Agencies
200 Park Avenue
New York, NY 10017

American Advertising Federation
1225 Connecticut Ave. N.W.
Washington, D.C. 20036

RELATED OCCUPATIONS:

JOB TITLE:	D.O.T.#:
Cartoonist	141.061-010
Clothes Designer	142.061-018
Jewelry and Flatwear Designer	704.131-010

D O T Fourth Edition, page 81

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: AERIAL-APPLICATOR PILOT

AERIAL-APPLICATOR PILOTS or Crop Dusters fly airplanes laden with liquid spray or chemical dust and apply it as they fly low over fields and orchards.

The job requires a very high degree of precision flying. It is a vital part of an agricultural area's economy.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Thoroughness	Mechanical	Depth perception
Mental alertness	Numerical	Good physical health
Ability to remain calm under stress		Physical stamina
Ability to take orders		Good vision and hearing
Attention to detail		Non-allergenic skin

YOU SHOULD KNOW THAT

- -Aerial-Applicator Pilots are exposed to accident and hazards from telephone wires, power lines, stand pipes, and other objects which rise above ground level.
- -many sprays and dusts which are used are highly poisonous.
- -an improperly applied dose of spray or dust on a field may kill rather than help plants.
- -knowledge of simple math and chemical properties are necessary when measuring and mixing chemicals.
- -knowledge of types of chemicals and their usage is a must.

YOU MUST BE ABLE TO

- -take off in a heavily loaded aircraft from short and often bumpy airstrips.
- -guide the aircraft over fields at an altitude of six to twenty feet.
- -apply proper chemicals in proper amounts only to the selected fields.

D.O.T. 196.263-010

PREPARATION AND TRAINING:

A high school education is the minimum education in most cases. Prospective pilots also will have a better chance of getting and holding a job if they have completed some college training.

RECOMMENDED HIGH SCHOOL SUBJECTS:

English	Physics	Machine Shop
Mathematics	Chemistry	Auto Shop
Physical Science	Agriculture	Drafting
Biology		

COURSE OF STUDY AFTER HIGH SCHOOL:

Flight training is available through commercial flight schools, usually operated from your local airport. Continuing your studies in agriculture and chemistry would also be helpful.

SPECIAL ENTRY REQUIREMENTS:

You should know that aside from the requirements listed on the first page, you must have a valid commercial pilot's license which can be obtained from the Federal Aviation Agency.

PROSPECTS AND OPPORTUNITIES:

JOB AVAILABILITY TRENDS

Opportunities for jobs look promising for the capable worker.
Agricultural aircraft pilots are needed in the state.
There are more than 4,500 agricultural pilots throughout the United States and their numbers are increasing.

ADVANCEMENT

Skilled pilots with business sense may also operate their own crop dusting business and may combine this with flight instruction or equipment service to provide a year round business. The pilot may also move into other areas of flying such as executive pilot, flight instruction, or charter pilot.

MORE ABOUT THE JOB:

The aerial-applicator's precision application of pesticides and fertilizers greatly contribute to higher yields per acre for the farmer.

The crop treatment process begins when the farmer contacts an aerial-applicator firm. Operators do not always recommend the type of spray to be applied but must be familiar with all kinds of crops, pesticides and fertilizers so they can converse intelligently with the farmer.

Then the operator and the pilot or pilots fly over the area to determine how and when the spray will be applied. In some cases, it may be decided that night application is best. At this time, any hazards are charted.

At the time of application, the pilot meets with the field crew. The crew includes flaggers who use red flags or flashlights to guide the pilot from the ground, and swampers or loaders who put the chemicals into hoppers or chemical tanks on the plane.

After the aircraft is loaded and checked to insure perfect performance, the pilot takes off to spray the field. When finished, the pilot returns to home base and cleans the aircraft.

JOB CLUSTER #1

"Agriculture"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary

The aerial-applicator pilot usually receives about 25 percent of the gross income of the aircraft piloted. The more chemicals applied, the greater the earnings. Although earnings under such a system may vary considerably, the average pilot earns from $9,000 to $17,000 annually. The apprentice will earn less, usually getting from 15 to 20 percent of the gross income of the plane to which assigned.

HOURS OF WORK

The aerial-applicator's hours may be highly irregular. The aerial-applicator who follows the crops throughout the state or United States may keep busy much of the year. Most application work is done in the early morning or late evening hours when the air is calm.

FRINGE BENEFITS

Depending on the length and place of employment, you may receive:

medical insurance life insurance standby pay

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Check at the local airfield and talk to any aerial-applicator for more details.

Fixed Base Operator - local airfield
F.A.A. or State Aeronautics Division
Agricultural Sources

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Airline Pilots Association, International
1625 Massachusetts Avenue N.W.
Washington, D.C. 20006

Montana Pilots Association
Pat Johnson, Secretary-Treasurer
1330 College Road
Helena, MT 59601

Montana Department of Community Affairs
Aeronautics Division
Airport Road
Helena, MT 59601

RELATED OCCUPATIONS:

See Dictionary of Occupational Titles (D.O.T.) page 146 - "Airplane Pilots and Navigators."

D O T Fourth Edition, page 146

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: AGRICULTURAL CHEMICALS FIELD PERSON (AGRONOMIST)

The AGRICULTURAL CHEMICALS FIELD PERSON meets with farmers, studies crops, takes soil and tissue tests, has the tests analyzed in a lab and then studies the results and recommends a particular fertilizer, insecticide or pesticide.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Responsibility	Verbal	Good health
Ability to work with others	Numerical	Good vision and hearing (natural or corrected)
Desire to serve others	Mechanical	Non-allergenic skin
Alertness	Color perception	Good speech
Neatness		Ability to withstand weather conditions found in field work
Tact		

YOU SHOULD KNOW THAT

-you must drive a car, usually furnished by the company;
-work hours are unpredictable, you are pretty much your own boss;
-you should be able to withstand working outdoors on hot days;
-specialization in treatment of one or two crops is becoming more prevalent.

YOU MUST BE ABLE TO

-observe and diagnose problems related to a certain crop;
-learn the characteristics of a variety of crop diseases as well as many chemicals used by farmers;
-learn to take soil samples and tissue tests;
-learn the characteristics and diseases of numerous crops grown in your area;
-recommend chemical treatments.

DOT 040.061-010

PREPARATION AND TRAINING:

A high school education is a must. Many companies perfer a candidate with a four-year degree. Work experience is valuable; summer employment or prior experience in farm work or agricultural chemical sales plus sufficient education will lead to better positions.

RECOMMENDED HIGH SCHOOL SUBJECTS:
Vocational Agriculture
English
Math
Chemistry
Merchandising
Sales
Commercial Law
Speech

The agricultural chemicals field is rapidly expanding. Today only a high school education is needed. Within a few years, many companies will require a four-year degree in agriculture. In addition to formal education, a background or experience in agriculture is important; a high school graduate raised on a farm often has an advantage over a college graduate with no farm experience.

SPECIAL ENTRY REQUIREMENTS:

The Agricultural Chemicals Field Person:

-usually should be at least twenty years old;
-must have a valid driver's license;
-should have knowledge of farm crops and accompanying diseases.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

There is a relatively slow rate of turnover but the field is rapidly increasing. Most opportunities are in large predominately agricultural regions.

ADVANCEMENT

The agricultural chemicals field person with additional experience and training can become district manager, regional manager, agricultural chemicals firm owner.

MORE ABOUT THE JOB:

The Agricultural Chemicals Field Person:

-makes contacts and establishes sound business relationships with area farmers;
-analyzes soil conditions;
-takes periodic soil samples;
-runs tissue tests on plants, crops and trees;
-determines what chemical or chemicals will best suit the particular needs of a given situation, often choosing from a list of up to 200 possible chemical treatments;
-studies the various crops of the area and learns distinguishing characteristics and problems;
-sells the customer on a particular crop treatment;
-determines mixing ratio;
-often supervises spraying operations including setting spraying rates for a particular situation;
-after treatments, often checks progress of crop and success of treatment;
-advises farmers on ways to handle crop difficulties with or without chemical treatment;
-spends about 90% of his/her working time in the field;
-often remains on 24-hour call.

JOB CLUSTER #1

"Agri-Business and Natural Resources"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
varies	$850-1,500	$1,000/mo	$850/mo

Salaries may vary throughout the state. Check a local service for current information in your area.

HOURS OF WORK

The field person is pretty much his/her own boss. Work is seasonal to some extent; during peak months, the field person may work up to 60 hours a week. Weekend and evening work is usually the rule rather than the exception.

FRINGE BENEFITS

Depending on the place of employment, benefits may include:

retirement plan	paid holidays	paid vacation
health insurance	disability plan	furnished transportation
life insurance		

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LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

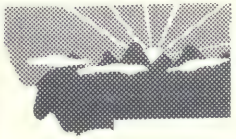
American Society of Agronomy
Crop Science Society of America
Soil Science Society of America
677 South Segoe Road
Madison, Wisconsin 53711

U. S. Department of Agriculture
Washington, D. C. 20250

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Plant pathologist	041.061-086
Soil Scientist	040.061-058

D.O.T. Fourth Edition, page 44



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: AGRICULTURAL CHEMICAL SALES REPRESENTATIVE

AGRICULTURAL CHEMICAL SALES REPRESENTATIVES are employed by manufacturers of agricultural chemicals. Their job is to visit growers and offer the company's line of chemicals, fertilizers and pesticides to help solve the grower's problems. The sales representatives are expected to be familiar not only with their company's products, but also with plant diseases, insect pests and farm operations.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Neat appearance	Verbal	Good general health
Interest in farming	Clerical	Ability to lift light loads
Interest in people	Numerical	Ability to withstand weather conditions found in field work
Alertness	Scientific	
Responsibility		

YOU SHOULD KNOW THAT

- -agricultural chemical sales representatives are occasionally subject to such hazards as entering fields where pesticides have recently been used;
- -you will be expected to become familiar with agricultural production problems and the entire line of products your company has developed to remedy them.

YOU MUST BE ABLE TO

- -work closely with people, analyze various types of farm production problems and help the growers solve them;
- -convince prospective buyers that your firm's chemicals offer the best solution to productive needs.

DOT 262.357-010

PREPARATION AND TRAINING:

Community or four-year college training in chemistry, agriculture and public speaking is helpful. Graduates may receive preference. On-the-job training or summer work on farms and ranches is highly beneficial.

RECOMMENDED HIGH SCHOOL SUBJECTS:

Courses in agriculture are highly recommended. It also would be well for you to take public speaking, particularly debate, which will develop your persuasive powers. Chemistry is essential to an understanding of agricultural chemicals. The ability to talk and write clear, concise English is very important.

COURSE OF STUDY AFTER HIGH SCHOOL:

The student should take courses in agriculture, English, public speaking and chemistry.

ADDITIONAL FACTS ABOUT TRAINING:

Many growers have summer jobs for young people. The work may be difficult, but it will help you get a view of the farm industry that is vital to the interested student.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

The recent strong demand for agricultural chemical sales representatives will probably level off or possibly decline in the future because of concern about possible ecological damage from some chemical products. However, opportunities will continue for well-trained people, particularly those with farming or ranching backgrounds. Most jobs are in rural areas.

ADVANCEMENT

Sales Representatives may advance to sales managers or district manager.

MORE ABOUT THE JOB:

The job of the agricultural chemical sales representative is a vital one in the state's agricultural production picture. With diminishing amounts of farm land on which to grow crops, it is obvious that each acre of farm land must produce more and more each year. To get greater yields, chemical companies have developed fertilizer products which condition the soil. There are hundreds of chemical pesticides made to kill pests and eradicate diseases.

The sales representative is the person who helps the grower choose the proper chemicals for a particular growing problem. The representative may:

-visit the grower and inspect crops;
-examine trees or plants in question to determine what disease has struck;
-take plant or soil samples for analysis;
-review with the rancher a comprehensive program for plant care;
-advise on preventive control measures to prevent future soil or disease problems;
-consult with the rancher on nutritional needs of various plants;
-write orders for delivery of chemicals involved in treatment;
-advise on the type of application (i.e., ground spray, aerial spray);
-suggest timing and frequency of application;
-make arrangements or suggestions for application if the rancher does not have the equipment.

While the job is one of selling, it is not the type of high pressure sales one might find with other commodities and this is why the term sales representative is used.

JOB CLUSTER #12

"Marketing and Distribution"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40-48	$550-1,200/mo	$750-950/mo	$420-470 while in training.

Salaries may vary widely depending on the individual manufacturer or chemical firm. Some pay straight salary, others pay salary plus commission, and still others pay on a commission basis only.

HOURS OF WORK

The forty-hour workweek is standard but like most other sales jobs, there may be evening or weekend work if a particularly important account is involved. In general, however, the sales representative can expect reasonably normal hours.

FRINGE BENEFITS

Depending on the place of employment, some or all of the following fringe benefits may be available:

paid vacation	retirement plan	group insurance
health insurance	sick leave	profit sharing
incentive bonuses	worker's compensation	

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Contact your County Agent.

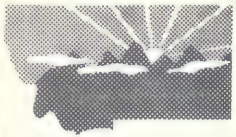
ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

American Society of Agronomy
Crop Science Society of America
Soil Science Society of America
677 South Segoe Road
Madison, Wisconsin 53711

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Pharmaceutical detailer	262.157-010
Veterinarian supply sales	276.357-018



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: AGRICULTURAL COMMODITIES INSPECTOR (GRADER)

The AGRICULTURAL COMMODITIES INSPECTOR inspects various agricultural products including fresh fruit and vegetables, grains, nursery stock and livestock, and insures compliance to state and county agricultural requirements of size, quality and quantity.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Honesty	Some verbal	Good general health
Tact	Clerical	Physical stamina
Dependability	Numerical	Normal vision
Alertness		Eye-hand coordination
Ability to work with others		Finger dexterity
Thoroughness		Free of communicable diseases
		Ability to work while standing

YOU SHOULD KNOW THAT

Graders may work in sheds and weigh stations in the country, at canning plants or stockyards.
Work is seasonal.
A high school education is usually required and you must be at least 20 years old.
You may work long hours during peak seasons.

YOU MUST BE ABLE TO

Deal with farmers and ranchers whose products you must grade;
demonstrate tact when rejecting loads;
perform a variety of fairly routine tasks including keeping accurate records of all products graded;
stand on your feet most of the time, often for up to 14 hours a day;
learn to judge the size, texture, ripeness and quality of agricultural commodities.

DOT 168.287-010

PREPARATION AND TRAINING:

Most agricultural commodities grading is done under the direction of the State Department of Agriculture and for the United States Department of Agriculture. For this work a high school education is usually required and many persons in this field have had some college training. However, a candidate with a good high school education is sufficiently trained. A U. S. Department of Agriculture license may be required for each product inspected.

HIGH SCHOOL COURSES:

The candidate should pursue a general high school course of study including English, speech, general mathematics, bookkeeping, record keeping.

ADDITIONAL FACTS ABOUT TRAINING:

Your employer will provide a short, usually two-week, training course during which time you will learn the various procedures and methods in agricultural grading. You will also receive on-the-job supervised instruction. This usually means working on a trial basis under the supervision of an experienced grader until you show you can do the job. Most grading work is seasonal and many summer crop graders are students and teachers working to supplement their regular income. In order to work as a grader, you must complete the training program and pass a test.

JOB CLUSTER # 1

"Agribusiness & Natural Resources"

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities for seasonal work are generally excellent. Turnover is moderate.
Opportunities for year-round work are only fair, but some openings do exist.
Opportunities for summer work especially for college students are very good.
The opportunities are best in large agricultural areas.

ADVANCEMENT

With additional experience and training, the agricultural commodities inspector can become head station grader, assistant supervisor, supervisor of grading, regional office manager.

MORE ABOUT THE JOB:

The Agricultural Commodities Inspector:

may inspect the various commodities at grading stations, processing plants or canning houses;
may work outside in the hot sun or large shed;
usually must be certified or licensed by the state or federal agricultural department;
is responsible for rejecting any products that do not meet set standards of quality, size or texture;
must keep a detailed and accurate account of all products inspected.

His/her tasks may include:

weighing and/or recording the weight of products en route to a packing house or cannery;
taking random samples of products and removing them from trucks;
using a variety of aids, testing the products for size, texture, quality, ripeness and defects;
approving or rejecting a load of products on the basis of inspection;
issuing approval slips or stamping load if load is approved;
dealing with angry farmers when their loads are rejected;
recording all dealings in record book;
reporting to supervisor at end of day and turning in all reports.

JOB CLUSTER #1

"Agribusiness and Natural Resources"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	40+	$10,600-13,250/yr		$10,600/yr

Salaries may vary throughout the state. You may wish to check a local source for accurate salary information in your area.

HOURS OF WORK

The hours of an inspector are irregular and are dependent on the schedule of harvesting or picking. During slack weeks, he/she may work less than forty hours, but in the peak season, he/she may work up to fourteen hours a day. Weekend and evening and other overtime work is quite common.

FRINGE BENEFITS

Depending on the employer, benefits may include:

overtime pay	expense allowance	health plan
mileage allowance	disability plan	life insurance
paid vacations		

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

State Department of Agriculture

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

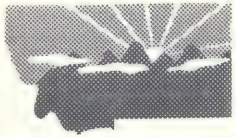
U. S. Department of Agriculture
Washington, D.C. 20250

Montana Department of Agriculture/Commodity Services Bureau
Scott Hart Building
303 Roberts
Helena, MT 59601

RELATED OCCUPATIONS:

JOB TITLE:	D.O.T.#
Inspector, Quality Assurance	168.287-014
Logging Operations Inspector	168.267-070
Inspector, Railroad	168.287-018

D.O.T. Fourth Edition, page 104



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: AGRICULTURAL LAB TESTER

The AGRICULTURAL LAB TESTER performs tests to insure that agricultural products are developed within particular specifications. He/she may work in a pesticide plant making chemical analysis of finished sprays or may work in a cannery analyzing sugar content of fresh fruit. He/she makes chemical analysis as well as visual checks.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Dependability	Numerical	Average health
Sense of responsibility	Verbal	Eye-hand coordination
Patience	Clerical	Finger dexterity
Interest in working with chemicals	Mechanical	Able to handle lab glassware

YOU SHOULD KNOW THAT

- most employers prefer to hire technicians with college level chemistry, math and biology.
- you will be required to write clear and complete reports.

YOU MUST BE ABLE TO

- follow written and spoken instructions precisely;
- make very accurate measurements;
- do basic arithmetic and systems measurement used in laboratory work.

D.O.T. 029.261-010

PREPARATION AND TRAINING:

High school graduation is the absolute minimum. Employers prefer those who have had some college training and for some jobs, four-year college graduates.

RECOMMENDED HIGH SCHOOL SUBJECTS:

Chemistry	Physics
Algebra	Geometry
Trigonometry	Life Science
Agriculture	

COURSES OF STUDY AFTER HIGH SCHOOL:

Some colleges offer programs in agricultural lab technology. Courses should include:

Agricultural Science	Chemistry
Agronomy	Mathematics
Report Writing	Agricultural Lab Techniques
Bacteriology	Crops

SPECIAL ENTRY REQUIREMENTS:

Some companies may require you to take a pre-employment aptitude test. A physical exam may also be required.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Food processing industries are expanding along with such industries as agricultural chemical manufacturing and the government is requiring more and more inspection and control of food products. For these reasons, employment prospects are expected to be good. While exact number of jobs is difficult to define, it should be noted that the entire area of science and laboratory work is expanding rapidly throughout the United States and that there currently is a shortage of trained technicians.

ADVANCEMENT

Opportunities for advancement generally are good. There are usually several steps (Technologists I, II, III) for the technician. In larger labs, the worker can advance to such positions as Quality Control Supervisor or to Chief Technician.

MORE ABOUT THE JOB:

The Agricultural Lab Technician performs tests and analysis necessary to see that agricultural products are delivered within certain specifications. He/she may be employed in:

Canneries
Agricultural chemical plants
Mild producing plants
Frozen food processing plants
Agricultural research firms

Lab Technicians perform tests to determine such things as acidity or sugar content in fruits or butter fat content in milk, The Agricultural Lab Technician combines many of the skills of a chemist with a basic knowledge of agriculture to become a specialist in his particular field. Usually the work is fairly routine to start, although with ability and experience, you may be promoted to jobs requiring more difficult assignments. Many firms give preference to four-year college graduates or at least to students who have had college level chemistry, biology, and bacteriology.

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40-44	$3.15-$6.00/hr	$4.50-$5.00/hr	$3.15-$3.75/hr

Salaries may vary throughout the state. A local source should be checked for accurate salary information for specific areas.

HOURS OF WORK

While the standard workweek is forty hours, there is a good chance you will work overtime during peak seasons if you are employed in a food processing firm. By the same token, there may be layoffs during the slack seasons. Teachers and college students find part-time summer work as lab technicians during the summer months.

FRINGE BENEFITS

Depending on the place and length of employment, some or all of the fringe benefits may be available:

retirement plan
paid vacation & holidays
sick leave
health insurance
overtime pay

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

U. S. Department of Agriculture
Washington, D.C. 20250

Department of Commerce
Washington, D.C. 20230

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Laboratory Technician	019.381-010

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: AIR CONDITIONING AND REFRIGERATION MECHANIC

An AIR CONDITIONING AND REFRIGERATION MECHANIC is a technician who repairs cooling or refrigeration systems. The MECHANIC must install these various systems in homes, offices, hospitals, etc. An AIR CONDITIONING AND REFRIGERATION MECHANIC must also aid in the maintenance of these systems after they have been installed.

An AIR CONDITIONING AND REFRIGERATION MECHANIC works on equipment ranging in size from small window air conditioners to large central plant type air conditioning or refrigeration systems.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Persistence	Ability to use independent judgement	Normal or corrected eyesight
Accuracy	Perform work in awkward or cramped positions	Good physical health
Thoroughness	Ability to do detailed work	Able to lift, stoop, pull or push
Dependability		
Pride in work		

YOU SHOULD KNOW THAT

- the beginner's work consists of lifting, loading, cleaning up and performing relatively simple jobs.
- mechanical aptitude and an interest in electricity are important qualifications for air conditioning mechanics.
- mechanics are sometimes required to work at great heights when installing new equipment.

YOU MUST BE ABLE TO

- diagnose the cause of breakdowns and make necessary repairs.
- follow blueprints and design specifications.
- install new equipment to the prescribed code standards.
- work in cramped, uncomfortable positions for long periods.

DOT 637.261-026

PREPARATION AND TRAINING:

The air conditioning and refrigeration mechanic should have a high school education or its equivalent. When available, a vocational course in heating, air conditioning and refrigeration is recommended. At present, the Billings Vocational-Technical Center offers such a course.

RECOMMENDED HIGH SCHOOL COURSES:

Shop classes in machine operation	Mechanical Drawing	Physics
Basic Electricity	Geometry	Drafting

Most mechanics start as helpers and acquire the skills of their trade informally by working for several years under experienced crafts people usually in an apprenticeship program. Check with your local employment office for more information about an apprenticeship.

You may learn many essentials of the trade in the Armed Forces of the United States.

SPECIAL ENTRY REQUIREMENTS:

The air conditioning and refrigeration mechanic job is considered a unionized trade.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities are excellent for skilled and well-trained mechanics.
The demand for air conditioning and refrigeration mechanics is greater than the supply.

ADVANCEMENT

Advancement opportunities are excellent for those who have the interest, aptitude and necessary education and training.

The air conditioning and refrigeration mechanics can become specialists in design or development, a technical sales person,or open their own business as contractors or distributors.

MORE ABOUT THE JOB:

The air conditioning and refrigeration mechanic installs and repairs equipment in homes, office building, factories, food stores, restaurants and other establishments. More specifically, refrigeration mechanics may:

read and interpret blueprints
prepare their own working diagrams
measure and cut pipes
design layouts for heating, cooling or refrigeration systems
clean and lubricate machinery
replenish liquid refrigerant
adjust valves and examine equipment for leaks

Refrigeration mechanics:

use common hand tools
use a variety of electrical power tools
use complex testing equipment

The majority of mechanics work for dealers and contractors. Other employers are construction companies, department stores, hotels, restaurant and food store chains, factories and warehouses. Some operate their own repair shops.

Refrigeration mechanics are employed in all areas of the country; however, metropolitan areas have the greatest need.

JOB CLUSTER #4
"Construction"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$7-$12/hr.	$9.50/hr.	$7.20/hr.

Wage scales may vary throughout the state. Check a local union or employment service for information pertinent to your area.

HOURS OF WORK

The forty-hour workweek is normal. Overtime or irregular hours occur during peak energy-use seasons.

FRINGE BENEFITS

Depending upon the employer, you may receive:

medical and life insurance plans
retirement plans
paid vacations and holidays

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

For more information on the apprenticeship program, see the Index.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Air-Conditioning and Refrigeration Institute
1815 N. Fort Myer Drive
Arlington, VA 22209

(The institute prefers not to receive individual requests for large quantities of pamphlets.)

RELATED OCCUPATIONS:

JOB TITLE:	D.O.T.#:
Office Machine Servicer	633.281-018
Television & Radio Repairer	720.281-018
Appliance Repairer	723.584-010
Automotive Body Repairer	807.381-010
Air Conditioning Installer-Servicer	637.261-010
Environmental Control System Installer Servicer	637.261-014

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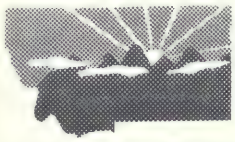


MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: AIRCRAFT FUEL SERVICER

The AIRCRAFT FUEL SERVICER operates a gasoline service station for aircraft. The servicer is responsible for fueling aircraft and for checking engine oil levels, tire pressures and other items for airplanes.

Note: Many fueling facilities service the scheduled air carriers.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Interest in aviation	Verbal	Good general health
Ability to get along with people	Clerical	Eye-hand-foot coordination
Dependable	Numerical	Manual dexterity
Attention to detail		

YOU SHOULD KNOW THAT

-failure to properly service an airplane could cause a crash and injury or loss of life.
-there are opportunities for part-time workers, particularly on weekends.
-most part-time employees are student pilots or pilots and have a demonstrated interested in flying.

YOU MUST BE ABLE TO

-learn service techniques for a wide variety of airplanes.
-operate gasoline pumps and other related service station equipment.
-recognize hazardous mechanical defects in aircraft and warn the pilot.
-demonstrate above-average responsibility.
-learn the color codes for octane rating and how to determine which fuel is required for each aircraft.

DOT 915.467-010

PREPARATION AND TRAINING:

There is no formal minimum schooling, but high school graduates are preferred by all employers.

HIGH SCHOOL COURSE OF STUDY MIGHT INCLUDE:

Shop or Industrial Arts courses
Business Arithmetic
Beginning Bookkeeping

There is no requirement for schooling after high school. However, the employee who is interested in advancing to other phases of aviation would do well to take whatever courses are available in aviation on a postsecondary level.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Jobs exist at airports of all sizes. Because of a booming interest in general aviation (light planes), there is an increasing demand for qualified workers, however, the overall number of job openings remains relatively low.

Opportunities exist mainly for young student pilots who may need part-time work while they are getting an education.

The number of full-time professional station owners also is on the increase, but still involves a relatively low number of jobs.

ADVANCEMENT

The qualified, experienced worker can become a station manager or owner. He/she may also move into other phases of aircraft maintenance, such as aircraft and engine mechanic, or into such aviation occupations as commerical pilot. These both require additional training and certification.

MORE ABOUT THE JOB:

The aircraft service station operator or attendant provides service to private and commercial pilots at airports throughout Montana. This involves a great degree of responsibility.

The servicer must:

- -be familiar with fuel tank placement and fueling procedures for many different kinds of airplanes.
- -know which octane gasoline each airplane requires, depending on its make and engine type.
- -check oil carefully, noting oil level to the pilot.
- -be able to check tire pressures, wash windshields, and perform other routine operations.
- -be alert to spot any possible hazards which might create flight problems, such as damaged landing gear or obvious oil or fuel leak.
- -fill fuel tanks as directed by the aircraft owner using gasoline pumps.
- -check tires with an accurate gauge and add air if needed.
- -make a charge ticket and handle cash sales.
- -note the identification number of the aircraft on the ticket and list service performed and the amount of the sale.

Usually the owner or manager of the station also will be required to do some bookkeeping work including keeping records of fuel receipts from the distributor and preparing statements for billing.

JOB CLUSTER #15

"Transportation"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40-60	$5.20-$5.75/hr	$5.50/hr	$5.20/hr

Salaries may vary throughout the state.

HOURS OF WORK

Hours of work may vary considerably. A normal work day is 10 hours; part-time workers usually work 10 hours a day each weekend. There may also be evening work in the summer. Full-time workers may put in as much as 60 hours a week.

FRINGE BENEFITS

Depending on place and length of employment, some or all of the following may be available:

medical insurance
discount on fuel

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Check at your local airfield

ADDITIONAL SOURCES OF INFORMATION:

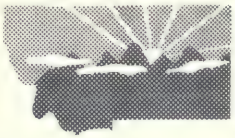
Your school counselor and librarian may also help you find additional information

There is little printed information on this occupation.

RELATED OCCUPATIONS:

JOB TITLE:	D.O.T.#:
Garageman, Industrial (auto. ser.)	915.637-014
Tire Repairer	915.684-010

D O T Fourth Edition, page 889



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: AIR FRAME AND POWER PLANT MECHANIC

The AIR FRAME and POWER PLANT MECHANIC services, repairs and overhauls aircraft and aircraft engines to insure airworthiness: Repairs, replaces and assembles parts, such as wings, fuselage, tail assembly, landing gear, control cables, propeller assembly, and fuel and oil tanks, using tools, such as power shears, sheet metal breaker, arc and acetylene welding equipment, rivet gun, and air or electric drills to rebuild or replace airframe or its components. Examines engines for cracked cylinders and oil leaks and listens to detect sounds of malfunctioning, such as sticking or burnt valves. Tests engine operation and replaces or repairs worn parts.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Accuracy	Ability to work under trying conditions	Manual dexterity
Cooperative	Understand and apply principles	Good health
Conscientiousness		Good hearing & eyesight
Interest in mechanics		Average strength
Dependable		Good eye-hand coordination

YOU SHOULD KNOW THAT

- you must pass a test and get a license from the Federal Aviation Agency
- working conditions are sometimes uncomfortable
- hazards from burns, cuts, or falls are possible
- there is a need, at times, to use work stands several feet high or to work in precarious positions

YOU MUST BE ABLE TO

- work accurately and precisely and be thorough in every detail
- use independent judgment in planning work and selecting tools
- read blueprints or diagrams
- use hand and power tools

DOT 621.281-014

PREPARATION AND TRAINING:

You need a high school education.

RECOMMENDED HIGH SCHOOL SUBJECTS:

Math	Chemistry	Auto Mechanics
Physics	Drafting	Machine Shop
Blueprint Reading		

COURSE OF STUDY AFTER HIGH SCHOOL:

When available, a vocational course in mechanics is recommended. The Helena Vocational-Technical Center offers a course in Air Frame and Power Plant Maintenance Technician.

Check with your local employment office for possible apprenticeship programs in your area.

The trade can be learned as a helper or apprentice under experienced mechanics. Some airlines have their own apprentice training programs. A Federal Aviation Agency license is necessary and you must pass a written, oral, and practical examination.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

The number of mechanics employed by commercial airlines will not grow too rapidly in the next few years. However, in the field of general aviation, including private planes, company planes and air cargo service, the growth will be rapid and steady. This will result in many new job openings becoming available for certified mechanics. Opportunities will also open for independent repair shops that repair general aviation aircraft.

ADVANCEMENT

The line of advancement after the mechanic obtains journeyman status is to Head Mechanic (or Crew Chief), Inspector, and Shop Supervisor.

With additional training, you may apply for certification as a flight engineer or F.A.A. inspector.

MORE ABOUT THE JOB:

The Aircraft Mechanics are responsible for the safety of the passengers and crew of the airplanes they work on. Skillful and conscientious work is the basic requirement. The Air Frame Mechanic works on the aircraft fuselage, wings, and landing gear. The Power Plant Mechanic works on the engine, either reciprocal jet or rocket.

The may also:

- Maintain the sheet metal or fabric surfaces;
- maintain the engine in working order;
- work on components such as landing gear, propellers, or hydraulic gear;
- do work in communication control equipment and instruments;
- take apart complex components;
- replace damaged or worn parts, put them together again, and test to make sure they are operating perfectly.

Airplane mechanics employed in general aviation are required to do all types of work while those at commercial airports are specialized. All commercial airline mechanics belong to a union. In a large organization, large and expensive equipment is often used to diagnose trouble and help the mechanic correct it.

JOB CLUSTER #15

"Transportation"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$20,000 - $25,000 annually		

Salaries vary throughout the U.S. Check a local area of interest for accurate salary information.

HOURS OF WORK

Although the average workweek is forty hours, a large percentage of those employed work forty-four to forty-eight hours and receive time and one-half pay for overtime work. In commercial aviation, a mechanic may work a rotating eight-hour shift.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

paid vacation	overtime pay	retirement plan
health insurance	sick leave	

Commercial airlines offer reduced travel rates for employees and family.

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Air Transport Association of America
1709 New York Avenue, N.W.
Washington, D.C. 20006

Aviation Maintenance Foundation
P. O. Box 739
Basin, Wyoming 82410

RELATED OCCUPATIONS:

JOB TITLE:	D.O.T.#:
Aircraft Engine Mechanic	621.281-014
Aircraft Engine Dismantler	621.281-014
Aircraft Engine Installer	621.281-014
Instrument Repairer	710.281-026
Aircraft Assembler, Power Plant	806.381-022
Aircraft Body Repairer	807.261-010
Aircraft Engine Assembler	621.281-014

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: AIR HAMMER OPERATOR

The AIR HAMMER OPERATOR uses tools operated by compressed air to break asphalt, concrete and stone or to loosen or pack earth, stone and clay. He/She drills holes in concrete and performs other jobs necessary to road, sidewalk or building foundation construction. He/She may be employed by a private firm or state or county agency.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Responsible	Mechanical	Good physical health
Pride in workmanship	Ability to take orders	Eye-hand coordination
Dependable	Adaptable to routine tasks	Finger dexterity
Preference for outdoor work		Ability to lift heavy objects
		Agility
		Physical stamina

YOU SHOULD KNOW THAT

Most of the work is done out of doors.
Competition is fierce since there are many qualified applicants for each opening.
Upon employment you will receive supervised on-the-job training.
Experience with air compression operated tools is helpful.
You may be asked to drive a truck. If so, you will need a valid driver's license.

YOU MUST BE ABLE TO

Work out of doors, many times in hot weather and in dust and dirt;
Lift heavy objects, including tools, chunks of concrete;
Follow oral and written instructions and rough diagrams;
Use air compression tools as well as hand tools such as pick, axe, and shovel;
In many instances, perform other construction work such as drive a truck, clean, repair & maintain water pipes, sewers, storm drains & perform minor work on equipment

DOL 869.667-026

PREPARATION AND TRAINING:

In most areas, the minimum education requirement is completion of eighth grade plus one year of experience in construction or maintenance work. However, the competition is tough and most employers now prefer high school graduates.

Postsecondary training is not required, but may be of some help to the candidate hoping to advance to better positions such as foreman or supervisor.

HIGH SCHOOL COURSES MAY INCLUDE

English
Metal Shop
Machine Shop
Mechanical Drafting

Most training in air compression tool operation comes on the job with supervised instruction by a foreman or experienced operator. Prior experience in construction or maintenance work will usually lead to more rapid employment and advancement.

SPECIAL ENTRY REQUIREMENTS

The air hammer operator
-must be at least 18 years old.
-may be required to have a valid driver's license.
-must be in excellent physical condition.
-must pass the Civil Service Examination for government agencies.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities are good although larger operations are relying more on heavy equipment and less on small air compression tools.
Opportunities are best in government agencies.
Turnover is rapid.

ADVANCEMENT

With sufficient experience and additional training, the air hammer operator can become:

heavy equipment operator
construction foreman
construction supervisor

MORE ABOUT THE JOB:

The duties of the air hammer operator may include:

-receiving directions, written or oral, from the supervisor.
-operating jack hammer or other air compression tools.
-working on concrete, earth, clay, or asphalt.
-using tools to break up streets, sidewalks, or building foundations.
-drilling holes in concrete for poles, foundations, or equipment.
-using hand tools such as pick, axe, shovel, or sledge hammer.
-lifting broken concrete onto truck.
-driving truck.
-operating special equipment used in road work and construction.

With additional training, you may:

-operate large construction equipment such as bulldozers or graders.
-supervise work of other laborers working at construction sites.

JOB CLUSTER #4
"Construction"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$11.72/Journeymen Scale		

Salaries may vary throughout the state. One depending factor is whether or not the job is union controlled. You may wish to check a local source for accurate salary information for your area.

HOURS OF WORK

Most air hammer operators work standard eight-hour days, five days a week. Some overtime and weekend work may be required and is paid at a rate of time and a half.

FRINGE BENEFITS

Depending on place and length of employment, you may receive the following:

retirement plan	life insurance	paid holidays
disability insurance	medical plan	paid vacations

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Contract a local contractor for more details.

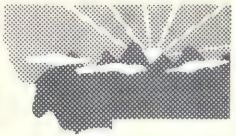
ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Associated General Contractors of America, Inc.
1957 E. Street N.W.
Washington, D.C. 20006

RELATED OCCUPATIONS:

See page 871 in the Dictionary of Occupational Titles for related occupations.



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: AIRLINE PILOT

AIRLINE PILOTS and CO-PILOTS operate multi-million dollar aircrafts. The PILOT is captain of the crew and supervises all pre-flight, in-flight, and post-flight operations of the aircraft and crew. The CO-PILOT is second in command and assists the captain in air-to-ground communications, in monitoring instruments and in operating the controls of the aircraft.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Analytical mind	Ability to work under pressure	Normal color vision
Alertness	Ability to make quick responsible decisions	Excellent vision, (20/20) natural or corrected
Responsible	Mechanical ability	Good hearing
Emotional Stability	Numerical	Good physical stamina
Command Respect	Knowledge of engineering	No physical handicaps that would prevent quick reactions
Calm under pressure		

YOU SHOULD KNOW THAT

-you must hold a commercial pilot certificate with an instrument rating.
-physical requirements for entry into this field are specific and exacting.
-military flight training and experience are especially valuable.
-pilots must have the ability to make fairly complex mathematical calculations.

YOU MUST BE ABLE TO

-command respect from your co-workers and the passengers on the flight.
-make quick decisions under pressure.
-pass a rigid physical examination from one to three times per year.
-work in a small confined space for long periods of time.

DOT 196.263-014

PREPARATION AND TRAINING:

Applicants are expected to have at least a high school diploma with a good grade point average.

You need a strong school record in math and science.

Many airlines and private schools offer programs (see your counselor).

You must be within the 21 to 30-year old range.

A private pilot's license is the first step in training. There will also be ground training.

Then comes a commercial rating and instrument rating, both of which involve ground and in-flight training.

Generally a minimum of 500 hours flight time is a prerequisite for employment by an airline.

PROSPECTS AND OPPORTUNITIES:

JOB AVAILABILITY TRENDS

Airline opportunities are limited in this state as the scheduled air carrier main offices are located elsewhere.

Some possibilities do exist within the state as executive pilots, because many companies have their own aircraft. Many fixed base operators employ pilots for their air taxi phase. In addition, there are considerable possibilities for aerial applicator pilots, aerial surveys, pipeline, powerline and forest fire patrol.

A flight instructor certificate is required to enter the instructional fields.

MORE ABOUT THE JOB:

Pilots may operate aircraft varying from twin-engined 40-passenger "short-haul" planes like the Convairs and Fairchild F27 to four-engine 400 passenger jetliners which fly intercontinental. Tasks performed by the pilot on any one flight vary accordingly to the size of the plane and the nature of the flight, but they are basically of the following nature:

-review dispatch papers to determine load weight, fuel supply, flight route schedule, and weather conditions;
-order any changes necessary in the above to insure flight safety;
-read gauges to verify the oil pressure, fuel level, hydraulic pressures, cabin pressures, all engines and landing gear are at prescribed levels before starting engines;
-start engines and taxi to runway;
-set brakes and accelerate engines to determine all components are working satisfactorily;
-obtain clearance from control tower to take off;
-follow tower instructions;
-using hand, foot and power controls, guide aircraft into the air and maintain prescribed flight route to destination;
-log information such as flight time, altitude flown, fuel consumed, weather conditions, and any mechanical problems.

Command pilots are designated as airplane captains. When second in command, the pilot is designated first officer or co-pilot.

JOB CLUSTER #15

"Transportation"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary

Veteran pilots receive $4,000 a month and up. There are premiums for some overseas flight routes. Salaries apply nationwide with only minor variations.

HOURS OF WORK

Flying time is a matter of government regulation and supervision. Flight hours may not exceed 100 hours in 30 days, 1000 hours in a year, 300 hours in 90 days; average is 60 flight hours per month.

FRINGE BENEFITS

Fringe benefits are usually excellent and depend on the place and length of employment:

- Stock options
- Retirement plan
- Vacation (two weeks starting, one month for ten years of service)
- Profit sharing plans
- Free life insurance
- Health Plans

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Check with the local flying service and Federal aviation district office. They may be able to provide further information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Airline Pilots Association, International
1625 Massachusetts Avenue N.W.
Washington, D.C. 20036

Air Transport Association of America
1001 Connecticut Avenue, N.W.
Washington, D.C. 20036

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Executive Pilot	196.263-030
Facilities Flight Check Pilot	196.263-034
Test Pilot	196.263-042
Helicopter Pilot	196.263-038
Agriculture Pilot	196.263-010
Flight Instructor	196.223-010
Chief Pilot	196.167-010

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: AIR TRAFFIC CONTROL SPECIALIST, TOWER

The AIR TRAFFIC CONTROL SPECIALIST controls air traffic on and within vicinity of airport according to established procedures and policies to prevent collisions and to minimize delays arising from traffic congestion: Answers radio calls from arriving and departing aircraft and issues such landing and take-off instructions and information as runway to use, wind velocity and direction, visibility, taxiing instructions, and pertinent data on other aircraft operating in vicinity. He/she transers control of departing flights to and accepts control of arriving flights from air traffic control center, using telephone or interphone. He/she alerts airport emergency crew and other designated personnel by radio or telephone when airplanes are having flight difficulties.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Mentally alert	Verbal	Excellent hearing
Good memory	Spatial	Good eyesight
Emotionally mature	Clerical	Good eye-hand coordination
Interest in flying	Numerical	Good health
		Speak clearly

YOU SHOULD KNOW THAT

A Federal Civil Service examination must be passed to be licensed.
You must pass a rigid physical examination every year.
Minimum age is eighteen years.
Many air traffic controllers are experienced pilots.

YOU MUST BE ABLE TO

- work under pressure and stress
- make quick independent decisions
- concentrate amid noise and confusion
- take responsibility involvinn the safety of life and property

DOT 193.162-018

PREPARATION AND TRAINING:

Schooling would most often require a four-year college degree or a combination of three years of college and experience in a position of responsibility. Armed Forces experience in air traffic control may substitute for educational requirements.

RECOMMENDED HIGH SCHOOL SUBJECTS:

Public Speaking	Mathematics	Physics
Electricity	Radio	

ADDITIONAL FACTS ABOUT TRAINING:

Successful applicants are given four or more weeks of intensive training at the FAA Academy. After being assigned to a job in an airport, they receive additional classroom instruction and on-the-job training concerning specific traffic data. After working six months, they generally qualify as an assistant controller and receive additional training and tests of emotional stability before qualifying as controller.

JOB CLUSTER #15

"Transportation"

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

-Total employement of air traffic controllers is expected to increase.
-Further installation of automatic equipment eliminates some job openings while growth in the number of airport towers adds some.
-A few hundred job openings will occur each year because of the need to replace those workers who leave the field, retire, or die, and to operate the new facilities and meet the rapid increase in work load.

ADVANCEMENT

-Opportunities for promotion are competitive.
-Prospects are excellent for those with a high level of performance.
-A specified length of experience is needed for advancement to each higher rating.
-The usual progression is from trainee to intermediate, journeyman, watch supervisor, crew chief, deputy chief and chief.

MORE ABOUT THE JOB:

The controller in an airport tower directs air traffic within five miles of an airport. At large airports, however, the use of radar may extend traffic control to a distance of forty-five miles and to an altitude of 25,000 feet. After a plane leaves the airport area, a controller in the air traffic control center directs the movement along the federal airways over distances of several hundred miles and at altitudes from 700 to over 45,000 feet.

The pilot of a private plane may take off in good weather without giving notice of his/her plans, but a flight in inclement weather is permitted only if the plane and its pilot have been rated for instrument flight. In this circumstance, a pilot must fly under instrument flight rules (IFR) and is required to file a flight plan with the traffic control center.

The control tower uses two-way radio to issue clearances, to keep air traffic separated, and to give traffic information. If planes cannot land because of traffic density or weather conditions, the controller may stack some of the aircraft to provide altitude separation until conditions improve. Where precision radar is available, the controller must also make ground control approaches (GCA) which control the aircraft to the end of the runway.

The tower controller uses radio, telephone and intraphone to work closely with controllers at the center, with the weather bureau and with ground radio operators. He/she records IFR clearances including departing and arrival times. He/she also control all aircraft using the airport on VFR (Visual Flight Rules) flights.

He/she also
- controls the movement of workers and vehicles on and off the landing areas.
- monitors certain electronic landing and navigational aids and all airport lights.
- takes visibility observations during periods of low visibility and relays the information to the weather bureau and to pilots.

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$15,000-$30,000/yr	$22,300/yr	$15,000/yr

Controllers start at a GS-7 pay rating. Shift work between 6 p.m. and 6 a.m. is given a ten percent premium. Sunday work receives twenty-five percent premium pay.

HOURS OF WORK

Virtually all controller jobs involve shift work because most facilities operate on a 24-hour basis. The exact rotation of the shift is usually determined by the individual facility, but it could be that you might work several weeks from midnight to 8 a.m. followed by several weeks working from 4 p.m. until midnight. Your days off might not fall on weekends.

FRINGE BENEFITS

Air traffic controllers receive the same benefits as other federal employees. These include the following:

paid vacations
paid sick leave
life insurance
retirement plan
health insurance

VV10579

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Department of Transportation
Federal Aviation Administration
Rocky Mountain Region
10455 East 25th Avenue
Aurora, CO 80010

RELATED OCCUPATIONS:

JOB TITLE:	D.O.T.#:
Airline - Radio Operator, Chief (air transportation)	193.162-022
Air Traffic Coordinator (government service)	193.162-010
Chief Controller (air transportation)	193.167-010
Transportation Agent (airlines)	912.367-014

D.O.T. Fourth Edition, page 141

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: ALL-AROUND BUTCHER

The BUTCHER cuts animal carcasses into halves and quarters and different cuts of meat, preparing them for distribution to retail stores, restaurants, clubs and institutions. They work with pork, beef, veal and lamb. Meat cutters reduce the cuts received from the butcher to pieces desirable for customer consumption.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Cleanliness	Mechanical	Physical stamina
Efficiency	Good manual dexterity	Good vision (natural or corrected)
Good judgment	Numerical	Good general health
Good memory		Agile
Ability to adapt to routine work		Free of communicable diseases

YOU SHOULD KNOW THAT

-you may be required to join a union;
-you must be free from communicable diseases;
-you should have a strong back and be able to work on your feet all day;
-you should have good color perception;
-you should be able to work in low temperatures for long periods.

YOU MUST BE ABLE TO

-work around the smell and sight of blood and dead carcasses;
-do work which requires accuracy and which is of a routine, organized nature;
-work without supervision;
-follow written and oral instructions;
-work well with others, usually co-butchers.

DOT 525.381-014

PREPARATION AND TRAINING:

High school graduation is preferred by most employers and is required by some. Trade and technical training can be beneficial.

RECOMMENDED HIGH SCHOOL SUBJECTS:		
English	Speech	Typing
Retail Merchandising	Biology	Math
	Metal Shop	

COURSES AFTER HIGH SCHOOL:		
Machine Tool Principles and Practices	Business Law	Zoology
	Marketing	Supervision
Mechanics	Electricity	Consumer Problems
	Biology	

ADDITIONAL FACTS ABOUT TRAINING:

The apprentice meat jobber receives approximately 4,000 hours of supervised on-the-job training during apprenticeship. This is supplemented with a minimum of 144 hours each year of related classroom training. Some workers take jobs as independent grocers, military cooks or butchers to further their training.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Because of growing population, there is expected to be a moderate increase in the number of workers needed in the butchering industry.
Meat consumption per individual is also increasing, creating the need for experienced workers. New methods will result in the fuller use of new mechanical equipment, thus eliminating some jobs. The would-be butcher who is unable to get into the formal apprenticeship program must compete for entry jobs against workers who have gained experience in family-type operations and against young people who have contacts in the business or in the union.
Butchers are employed in cities of all sizes, but chances for employment are better in larger metropolitan areas.
Projected opportunities in Montana for the years 1970-85 are good.

ADVANCEMENT

Advancement in wholesale firms is rather limited, although some journeymen jobbers advance to managers or inspectors. Some become owners, but this is difficult to attain because of the cash outlay needed.

MORE ABOUT THE JOB:

The butcher is a wholesale worker. He/she cuts the larger amounts of meat into wholesale cuts and then sends them to retail establishments to be further reduced into customer consumable pieces.
Butchers may prepare meat for smoking.
They may also cut and wrap meat, although this is usually done by the retail meat cutter instead of a slaughter company.
They may trim, clean and salt hides.
The worker is frequently in low temperatures in rooms with wet floors or in a steamy pungent atmosphere.
Injuries to fingers and hands may sometimes result from careless use of tools or equipment.
Hernias or back injuries often occur.

JOB CLUSTER #

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$10.06/hr		

Apprenticeship scale begins at 70 of journeyman scale with an increase each six months until training is completed.

Salaries may vary throughout the state. Unions contribute much to salary range in the meat industry.

HOURS OF WORK

The normal workweek is forty hours, usually Monday through Friday with some Saturday work required. Holidays and Sundays are not usually worked.

FRINGE BENEFITS

Dependent on length and place of employment, you may receive:

retirement plan
health and life insurance
paid vacation and holidays
paid overtime

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

The butcher at your local meat market can give you further information.

Your local union or one in your area is a good source of information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Amalgamated Meat Cutters and
Butcher Workmen of North America
2800 North Sheridan Road
Chicago, Illinois 60657

American Meat Institute
P. O. Box 3556
Washington, D. C. 20007

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Baker (grain & feed mill)	526.381-018
Meat grader	525.387-010
Meat dresser	525.664-010
Dairy processing supervisor	529.131-014
Candy supervisor	529.130-010

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MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: AMBULANCE DRIVER

AMBULANCE DRIVERS operate the vehicles which transport sick or injured persons to the hospital. Drivers may be hospital employees or may work for an ambulance service. Their driving ability and driving record are better than average. Sometimes in emergencies, Ambulance Drivers administer first aid or restrain violent persons.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Willing to perform routine tasks	Mechanical	Good physical strength
Follow instructions	Spatial	Good vision & hearing (natural or corrected)
Work with others		Full use of the back
Remain calm during emergencies		Normal use of arms, hands, legs, and feet
To handle badly injured accident victims		
Be responsible, sympathetic and tactful		

YOU SHOULD KNOW THAT

You must be 21 years of age to qualify as an ambulance driver. Related ambulance attendant job is open to those 18 years of age.
You must be able to obtain an advanced first aid certificate to qualify.
Working conditions in an emergency situation are trying. However, there is much free time for the ambulance driver when not on call.

YOU MUST BE ABLE TO

Drive an automobile with skill and care;
Lift and carry injured and sick people up and down stairs & in other difficult places;
Perform most of your duties as an ambulance drive in accordance with pre-determined standard methods;
Perform many of your duties in unpleasant situations involving sick and injured people.

DOT 913.683-010

PREPARATION AND TRAINING:

The ambulance driver:
can qualify for the job without a high school diploma;
is considered better qualified and has better chances at employment with a complete high school education;
receives some on-the-job training, usually informally.

RECOMMENDED HIGH SCHOOL COURSES:

Driver's Education	Shop Courses
Physiology	First Aid
Auto Mechanics	English
Health	Psychology

ADDITIONAL FACTS ABOUT TRAINING:

A good knowledge of streets and other geographical aspects of your community and general area are extremely important.
All of the armed services of the United States offer good training in first aid and other required skills.
Some jobs as drivers and also as attendants are held part-time by college students to help pay educational costs.

SPECIAL ENTRY REQUIREMENTS:

Age: 21 years minimum
An advanced first aid card from the Red Cross
A standard driver's license plus a chauffeur's license

PROSPECTS AND OPPORTUNITIES:

JOB AVAILABILITY TRENDS

Demand for drivers should continue in the future because of the general growth in population. Because of the odd working hours and few chances for advancement, there is a high turnover rate in this occupation, which makes the possibility of employment very good. The best opportunities for employment are in the cities.

ADVANCEMENT

Drivers may enter business for themselves. Increases in salary and working on preferred shifts are forms of advancement.

With additional training the driver could be an Emergency Medical Technician

MORE ABOUT THE JOB:

Ambulance drivers perform services to sick and injured persons by transporting them to hospitals, convalescent homes and their own homes and provide additional services related to their basic transportation duties. Much of the transporting work of the ambulance driver involves no more than the normal hazards of driving on streets and highways. Driving in emergencies, however, requires above average driving skills and knowledge of driving techniques and safety. Drivers transporting the sick and injured must drive with the care and comfort of the patient in mind, avoiding sudden motions which might be harmful.

In addition to actual driving tasks, the ambulance driver:

lifts and carries patients to and from the ambulance to a hospital, home, or other destination;
applies all kinds of first aid techniques when such services are needed.

When not on call, ambulance drivers, with the help of attendants, keep the ambulance clean and ready to go when needed.

JOB CLUSTER #8
"Health"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
Varies	$5.00/$6.00 hr.		

Salaries may vary throughout the state. You should check a local source for salary information for your area.

HOURS OF WORK

Hours and days worked will vary

FRINGE BENEFITS

Available depending on place and length of employment:

paid vacations
sick leave
workman's compensation insurance
group insurance
unemployment insurance

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Your local ambulance service can provide you with further information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Division of Health Careers
American Hospital Association
840 North Lakeshore Drive
Chicago, Illinois 60611

RELATED OCCUPATIONS:

JOB TITLE:	D.O.T.#
Truck Driver	906.683-022
Commercial Bus Driver	913.463-010
School Bus Driver	913.463-010
Truck Driver (Long Distance)	905.663-014
Taxi Driver	913.463-018

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MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: ANESTHESIOLOGIST/ANESTHETIST

An ANESTHESIOLOGIST/ANESTHETIST administers anesthetics to render patients insensible to pain during surgical, obstetrical, and other medical procedures; examines patient to determine degree of surgical risk and type of anesthesia and sedation to administer and discusses findings with medical practitioner concerned with case.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Keen intelligence	Verbal	Abundant energy
Perseverance	Manual	Excellent health
Unusual perceptiveness	Scientific	Physical stamina
Ability to make decisions under pressure		Superior mental, manual and emotional control

YOU SHOULD KNOW THAT

You may stand much of the time.
You are under stress and must make quick, accurate decisions when administering anesthesia.
You must pass state licensing examination.

YOU MUST BE ABLE TO

-work early in the mornings when most operations are performed.
-pass a complete physical examination.
-work in uncomfortable mentally strenuous situations.
-be on call 24 hours a day sometimes.

DOT 070.101-010

PREPARATION AND TRAINING:

High school diploma or its equivalent is necessary. High school students planning to enter medical school or a nursing program should study admission requirements for both undergraduate and graduate programs. They should follow college preparatory courses in high school and take as much basic science as possible.

RECOMMENDED HIGH SCHOOL COURSES

Physical and Natural Sciences	English
Chemistry	Psychology
Physics	Sociology
Biology	Physiology

Although college is not currently required for nurse anesthetists, college training is highly recommended and may become required in the near future.

Registered nurses interested in becoming anesthetists must complete a postgraduate program of study of at least eighteen months in one of more than two hundred schools of anesthesia accredited by the American Association of Nurse Anesthetists. On passing the examinations, they become Certified Registered Nurse Anesthetists (CRNA). Qualifying examinations also establish eligibility for membership in the American Association of Nurse Anesthetists (AANA).

Much more training is required to become an anesthesiologist.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Currently, opportunities for employment are very good. The field is open for well-trained, qualified persons. This is a very new field, so many anesthetists are in demand around the country.

ADVANCEMENT

Advancement depends on one's place of employment. Advancements may occur in the areas of teaching, with higher salaries or promotion to an administrative position; in the field of research, with promotion to more technical, higher paying position; or more pay as a consultant.

MORE ABOUT THE JOB:

Anesthesiologists/Anesthetists have the opportunity to work with the public in helping to save lives and relieve pain or misery.

They reassure the patient with presurgery visits explaining the procedure of administering anesthesia and what the patient should expect. In the operating room, before and during surgery, anesthetists and anesthesiologists administer correct amounts of drugs, gases, or other anesthetics to make patients insensitive to pain. After surgery they bring patients safely back to consciousness.

Some of the job responsibilities are to:
-administer anesthesia to patient under direction of physician or dentist.
-act as consultant to intensive care areas of service.
-do research.
-teach.
-act as director of school or department of anesthesia.
-act as teacher and consultant in respiratory therapy, coronary care and premature nursing education.

JOB CLUSTER #8

"Health"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary

Earnings of anesthesiologists/anesthetists vary. Salaries may vary from $10,000-$30,000 annually depending on place of employment or if anesthesiologist/anesthetist is self-employed.

Because of varying salaries, you may wish to check with your local employment service or your local hospital.

HOURS OF WORK

Anesthesiologists/anesthetists are on call day and night, therefore, the hours may vary.

FRINGE BENEFITS

Depending on place and length of employment you may receive the following:

group insurance	health insurance	life insurance
pension plans	paid vacation	sick leave
unemployment insurance	workmen's compensation	

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

You may contact the personnel director of your local hospital.

ADDITIONAL SOURCES OF INFORMATION:

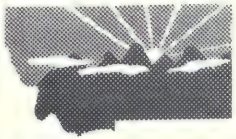
Your school counselor and librarian may also help you find additional information

National League for Nursing
Committee on Careers
10 Columbus Careers
New York, N.W. 10019

The Surgeon General
U.S. Department of the Navy
Washington, D.C. 20310

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Ambulance Attendant	355.374-010
Occupational Therapist	076.121-010
ECG and EKG Technician	078.362-022 and 018
Medical Lab Technician	078.381-014
Medical Assistant	079.367-010
Medical Technologist	078.361-014
Operating Room Technician	079.374-022



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB:

APARTMENT HOUSE MANAGER (MANAGER, LODGING FACILITIES)

The APARTMENT MANAGER must rent apartments and keep the apartment vacancies at a minimum. The manager meets prospective tenants, gives information regarding rental rates, shows people through apartments, keeps an account of all transactions, collects rent, evicts troublesome tenants and calls professional plumbers and electricians when major repair work is needed.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits
- Mature
- Honest
- Tactful
- Dependable
- Adaptable
- Neat

Aptitudes
- Mechanical
- Some clerical
- Some verbal

Physical Abilities
- Good health
- Eye-hand coordination
- Normal vision and hearing
- Free from communicable diseases
- Good speech

YOU SHOULD KNOW THAT

- -your work may be either full or part-time; in general, the larger the apartment complex, the more time required and the higher the salary.
- -husband and wife team are often preferred by apartment owners (the husband can work at another job in the daytime and the wife handles the apartment duties).

YOU MUST BE ABLE TO

- -keep a record of all income and expenditures and collect monthly rent.
- -communicate effectively with tenants and potential tenants.
- -make minor repairs and do some maintenance work on building and grounds depending upon size.
- -handle complaints and maintain good customer relations.
- -adapt to a schedule which includes interruptions 24 hours a day.

D.O.T. 186.167-018

PREPARATION AND TRAINING:

Most employers prefer candidates with at least a high school education.

HIGH SCHOOL COURSES:

English	Typing	Speech
Business Math	Bookkeeping	Shop courses

COURSES AFTER HIGH SCHOOL MIGHT INCLUDE:

Small Business Management	Sociology
Accounting	Real Estate Practices
Bookkeeping	Real Estate Law

ADDITIONAL FACTS ABOUT TRAINING:

You will receive some on-the-job training, usually supervised by the owner of the apartment complex or the manager you are replacing.

SPECIAL ENTRY REQUIREMENTS:

Experience is not a written prerequisite, but young candidates can hope to be successful only if they demonstrate they are responsible and able to handle the duties associated with good management. Completion of high school, some college training, a good job record, good personal habits and training in apartment, hotel or motel management will greatly increase your chances of finding employment.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITIES AND DISTRIBUTION

Opportunities are expected to increase greatly as the trend in multiple housing complexes countinues, especially in large urban areas.
Turnover rate is extremely high.
Opportunities are best in large areas.

ADVANCEMENT

With experience and some financial backing, the apartment manager may be able to invest in an apartment building as an apartment owner.

MORE ABOUT THE JOB:

The duties of the apartment manager vary greatly according to the size of the apartment complex, number of tenants, age of buildings, recreational facilities (swimming pool, game room), and value of dwelling.

The apartment manager may perform some or all of the following:

place advertisements of vacancies in local newspapers;
meet with prospective renters;
explain and define terms of rental lease to renters;
prepare contract for lease and obtain signature of renter;
purchase supplies for complex;
arrange for outside services such as garbage pickup;
collect rent and issue receipts;
make minor repairs;
call in outside help for major repair work;
maintain swimming pool, including cleaning and filtering;
maintain lawn and flowers or arrange for outside firm to handle the work;
pay bills for outside maintenance work;
keep a detailed clerical account of all transactions including incoming rental fees and expenditures;
maintain a quiet atmosphere;
deal with and, if necessary, evict unruly tenants;
clean vacated apartments or hire outside team to clean;
be on call to assist tenants with problems, for instance, help tenants who are locked out or who have windows or doors that are stuck;
handle complaints or requests from tenants;
meet occasionally with apartment owners to review vacancy rate and problems.

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary

There is no set salary schedule. Pay varies depending on the size of the complex and the duties involved. Managers may earn additional money by performing maintenance chores, cleaning apartments or by keeping the vacancy rate below 5 percent. Check a local source for salary information in your area.

HOURS OF WORK

The manager may not be required to work more than eight hours a day, but an assistant must be on duty at least 12 hours a day. Often the manager is called on during the night. The job can be physically demanding with little uninterrupted free time depending on the size, type and condition of the apartment building.

FRINGE BENEFITS

Benefits vary with place of employment and policies.

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

The Employment Service helps many young people find jobs.
You may contact a youth representative at your local Employment Service Office

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Your school counselor and librarian may also help you find additional information

RELATED OCCUPATIONS:

Job Title	D.O.T.
Motel manager	320.137-014
Hotel manager	187.117-038
Theatre manager	187.167-154
House manager	187.167-154
Housing project manager	186.167-030
Marina manager	320.137-014
Trailer Park manager	320.137-014

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: APPLIANCE SERVICER (electrical)

An APPLIANCE SERVICER (electrical) installs, services and repairs stoves, refrigerators, dishwashing machines, and other electrical household or commercial appliances, using handtools, test equipment, and following wiring diagrams and manufacturer's specifications. In some businesses the servicer learns the selling aspects of the business.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Likes to perform a variety of tasks	Mechanical	Average physical strength
Enjoys working with people	Numerical	Able to climb and balance
Dependable		Able to stoop and kneel
Honest		Normal use of hands and arms
Likes to do precision work		Good eyesight (natural or corrected)
Clean and neat at all times		
Courteous		

YOU SHOULD KNOW THAT

You will be expected to have a good driving record.
Most work is inside; however, it may be in a cramped or unclean area.
You will be exposed to electrical shock and burns.
You are expected to be neat and clean when working in a customer's home.
You may work with very little direct supervision.

YOU MUST BE ABLE TO

Work well with people;
Use eyes in close work;
Use judgment and analytical ability to interpret data;
Repair equipment to prescribed standards;
Drive a station wagon or repair truck.

DOT 827.261-010

PREPARATION AND TRAINING:

The appliance servicer learns service skills in different ways:

most are hired as helpers and acquire skills in on the job training and work experience;
may start out helping to install appliances in homes;
may start out working in shops rebuilding used parts.

The company may provide classroom instruction. Many trainees take correspondence courses. The Billings Vocational-Technical Center offers appliance repair in their refrigeration and air conditioning course.

THE COURSE OF STUDY INCLUDES:

Subjects carried in high school or vocational school which would be helpful are:

Electricity Shop Mathematics Physics Public Speaking

ADDITIONAL FACTS ABOUT TRAINING:

Trainees are usually supervised closely for six to twelve months. Up to three years on the job experience is usually needed to become fully qualified. Employers look for applicants with intense desire to learn. Employers look for applicants who have graduated from high school or vocational school.

SPECIAL ENTRY REQUIREMENTS:

You may be able to enter the field with no formal training as a trainee.
Trainees may be expected to join a union.
You should have a good driving record.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Appliance mechanics are needed in nearly all areas, the biggest demand being in metropolitan areas.
The number of jobs is expected to increase fairly rapidly in the next ten years.
The demand presently outweighs the supply, but there is considerable competition for top jobs.
Job openings will result because of expected increased use of appliances.
Most appliance repair people own a shop or are employed by independent repair shops specializing in coin operated washing and dry cleaning machines.
One-fourth are employed by retail establishments.

ADVANCEMENT

The appliance servicer may:
be promoted to foreman, assistant service manager or service manager;
go into retail sales;
open their own shop or advance to executive position, such as regional or national service manager or parts manager.

MORE ABOUT THE JOB:

The size of the firm and the type of appliance serviced influence the appliance servicer's job duties.

In a large shop, the servicer may:

specialize in one line of appliances--refrigerators, washers and dryers;
work only on one particular brand of appliances;
repair only gas or only electrical appliances.

No two repair jobs are exactly the same. In the small shop where the job requires the "all around" journeyman, the repairer may:

go to the customer's home;
question the owner and test the equipment;
diagnose the trouble;
estimate the cost of parts and labor.

Appliance service people provide their own hand tools. However, the company provides such tools and equipment as: drill press, repair truck, grinders, soldering or welding tools, dollies for moving heavy equipment.

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	40-48	$13.20/hr Journeyman Scale		

Salaries may vary throughout the state. You may wish to check a local source for accurate salary information for your area.

HOURS OF WORK

Forty to forty-eight hours per week is standard. You may work overtime if an emergency arises.

FRINGE BENEFITS

Depending upon employer and length of employment, you may get:

paid vacation	sick leave	overtime pay
health insurance	retirement plan	profit sharing

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LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Check with your local appliance delaer or gas and electric company for more information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Association of Home Appliance Manufacturers
20 North Wacker Drive
Chicago, Illinois 60606

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Refrigeration Mechanic	827.361-014
Air Conditioning Installer	827.464-010
Air Conditioning Unit Tester	827.361-010
Electrical Appliance Repairer	827.584-010

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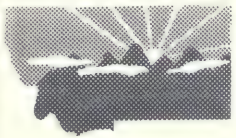


MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: ARCHITECT

ARCHITECTS plan and design all types of buildings using design and engineering principles. The goal is three part: (1) to design buildings that function effectively for their intended use, (2) to design buildings that will endure, and (3) to design buildings that will provide delight and pride, not only for the owners and occupants but also for the community in which they are situated.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Creativity	Mechanical	Good eyesight (natural corrected)
High degree of responsibility	Manual dexterity	Normal health
Logical orderly habits	Verbal	Ability to move about normally
Ability to work with others	Ability to organize	
Precision		

YOU SHOULD KNOW THAT

- The usual method of becoming a licensed architect is to complete a five-year college course, work for three years, then qualify by passing a state examination required for licensing.
- Working conditions for architects are usually excellent.
- Ability to draw freehand is important to success.

YOU MUST BE ABLE TO

- Visualize accurately the relationships between objects in space and be able to make accurate distinctions between color shades.
- Perform measurements and make scale drawings to exact specifications.
- Take orders, use techniques of persuasion and work well with all kinds of clients and other people on the job.
- Perform your job tasks under constant deadlines, working under pressure in many cases.

DOT 001.061-010

PREPARATION AND TRAINING:

The professional architect usually completes a five-year college course, then works in the field to gain the necessary experience.

THE COURSE OF STUDY INCLUDES:

High School: College preparatory major including mathematics, sciences, a language, and courses in mechanical drawing or drafting

College: A major in architecture

SPECIAL ENTRY REQUIREMENTS:

Check with the state on requirements for licensing

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITIES AND DISTRIBUTION

Extremely talented workers are in great demand.
Opportunities are fair for those trying to gain required work experience.

OPPORTUNITIES FOR ADVANCEMENT

Architects in private practice who are employed by large firms advance in time to progressively difficult, better paying assignments.
The most skilled may advance to the status of partner or associate in the firm.
Self employed architects advance in terms of the money they may earn as they become better known and increase the size of their clientele.
Those employed by government agencies advance through Civil Service procedures.

MORE ABOUT THE JOB:

The architect has certain common tasks whether employed by an architectural firm, self employed or working for public agency. Some of the regular duties include:

planning a building project, including making cost estimates, drawing preliminary designs and renderings and checking legal requirements;

preparing work drawings and specifications, including supervising drafters in the preparation of drawings, receiving bids and awarding contracts to building contractors;

supervising actual construction involving checking actual building work performed against architectural specifications.

At every stage in the above sequence of events, the architect deals with various individuals--client, drafter, builders and others. In all these dealings the architect exercises techniques of persuasion in a tactful fashion in order to satisfy the requirements of the project at hand in a professional and ethical manner.

JOB CLUSTER #7

"Arts & Humanities"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$1,000-$1,750		$1,000*

*The beginning salary range shown represents the pay the graduate of an accredited school might receive on entry at the beginning of the work experience phase of training. The licensed architect may start considerably higher. Actual earnings of top architects in private practice is considerably more than the wages shown.

HOURS OF WORK

In private practice, hours will average around forty per week. However, overtime work is not unusual due to deadlines. Hours with public agencies are forty per week, Monday through Friday.

FRINGE BENEFITS

Available depending on place and length of employment:

paid vacations and holidays
sick leave
bonuses (some private employers)
retirement plans
regular pay raises
with Civil Service

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

The Board of Architectural Examiners
Executive Secretary-Treasurer
Attn: Harold Rose
Bozeman, Montana 59715

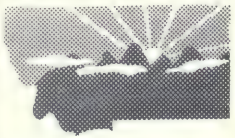
ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

American Institute of Architects
1735 New York Avenue, N.W.
Washington, D.C. 20006

RELATED OCCUPATIONS:

JOB TITLE:	D.O.T.
Architect, Marine (profess. & kin.)	001.061-014
Landscape architect	001.061-018
Architectural Drafter	001.261-010
Aeronautical Engineer	002.061-014



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: ARCHITECTURAL DRAFTER

The ARCHITECTURAL DRAFTER draws plans for artistic, architectural structural features for all types of buildings and structures. He/she estimates the quantity of materials needed for projects and computes the cost. He/she also makes free hand drawings of proposed structures when necessary to clarify the plans.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Patience	Mechanical	Good eyesight (normal or corrected)
Tolerance	Numerical	Sufficient use of all arms, hands and fingers
Interest in mathematics	Form perception	
Preference for working with details	Finger dexterity	
	Ability to concentrate	

YOU SHOULD KNOW THAT

- This is one of the many occupations in which some physical disabilities, especially of the body and legs, would not interfere with the performance of the duties.
- Although artistic abilities are not required, skill in freehand drawing is an asset.
- The architectural drafter must have a great deal of patience; a client for whom the employer is planning a building may change his/her mind several times in the early stages of the work.

YOU MUST BE ABLE TO

- Visualize objects in two and three dimensions.
- Understand and apply technical knowledge and theoretical principles involved in drafting.
- Perceive slight differences in visual matter.
- Letter with uniformity and speed.

DOT 001.261-010

PREPARATION AND TRAINING:

Today many firms rarely hire those with only high school training and drafting. A would-be drafter with only a high school diploma would start as a tracer. However, two years of college engineering or two years with a major in drafting is required for many jobs.

The Billings and Butte Vocational-Technical Centers offer courses in drafting. Northern Montana College has courses in drafting.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITIES AND DISTRIBUTION

The future of the architectural drafter is closely related to the health and stability of the building industry.
The trend in architects' offices is toward more and more hiring of students and apprentice architects as drafters.
This trend, coupled with new processes for photo reproduction of drawings and newly developed electronic drafting equipment, may limit jobs for future architectural drafters to those with good post high school technical training.

OPPORTUNITIES FOR ADVANCEMENT

For the drafter with no college degree, chances for advancement are limited.
The well trained, well qualified, industrious beginner should have little difficulty climbing the ladder from junior drafter to drafter to senior drafter.

MORE ABOUT THE JOB:

The drafter takes the architect's ideas and preliminary sketches and transforms them into pictures that can be understood by the client and into working drawings that can be used by building crafts people. In some instances, he/she must coordinate the drawings with the architect's plans so that the finished plans will show exact engineer's dimensions of every part of the building as well as the location of plumbing, heating, electrical, air conditioning, and other equipment.

The architectural drafter must know symbols and conventions used in architectural drawings and he/she must develop a facility for lettering well and speedily. Precise lettering is very important because it is an integral part of drawings presented to clients.

The drafter needs a working knowledge of the strength, characteristics, and limitations of materials. He/she must be able to specify by his/her drawings just what materials are to be used, employing the proper notations and symbols in doing so.

The drafter has numerous tools at his/her command--the drawing board, T-square, drafting machine, triangle ruler, compass, protractor, calculator, and other drawing instruments.

JOB CLUSTER #7
"Arts & Humanities"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$600-$800/mo		$600/mo

Salaries may vary throughout the state as whether employed by private industry or governmental agency.

HOURS OF WORK

The drafter normally works eight hours a day, five days a week. Overtime may be required when a job is under contracted deadline.

FRINGE BENEFITS

Depending upon place and length of employment, you may receive:

- life and health insurance
- retirement plans
- paid vacations and holidays
- social security

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Local architectural firms

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

American Institute for Design and Drafting
3119 Price Road
Bartlesville, OK 74003

American Federation of Technical Engineers
1126 16th St. NW
Washington, D.C. 20036

RELATED OCCUPATIONS:

JOB TITLE:	D.O.T.#:
Technical illustrator	017.281-034
Delineator	970.281-014
Auto design detailer	017.281-010
Detailer	017.261-018
Landscape drafter	001.261-014

A drafter can work in many fields, some are: aeronautical, mechanical, civil, electrical, structural, estimation, geological, topographical, landscape, plumbing and heating, and ventilating.

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MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: ARTIFICIAL INSEMINATOR (Agriculture)

ARTIFICIAL INSEMINATORS collect, process, package, and store bull semen for artificial insemination of cows. The semen is used by artificial inseminators to breed cattle. Sometimes the technician's and inseminator's jobs are performed by the same person.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Attention to detail	Numerical	Visual acuity
Dependability	Clerical	Manual dexterity
Honesty		Ability to ride a horse (in some areas)
Maturity		

YOU SHOULD KNOW THAT

-maturity is a definite asset.
-competition is keen in this industry.
-liking for animals is essential.
-there are far fewer artificial breeding lab technicians than there are artificial inseminators.

YOU MUST BE ABLE TO

-work to precise standards and procedures.
-work with people to solve cattle breeding problems.

DOT 413.384-016

PREPARATION AND TRAINING:

High school graduation is a must. Some college training is preferred.

RECOMMENDED HIGH SCHOOL SUBJECTS:

Agriculture	Biology	Science
Mathematics	Speech	Math
English	Chemistry	

COURSE OF STUDY AFTER HIGH SCHOOL:

As many courses as possible in animal husbandry, animal science, science (applied), English, record keeping and analysis.

ADDITIONAL FACTS ABOUT TRAINING:

The artificial insemination industry has schools to train technicians which involve about two weeks time.

See your counselor for a listing of these schools.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Throughout the United States, nearly 50% of dairy cows are artificially inseminated and 5% of the beef cattle. Throughout the world, there is a definite upward trend in this industry. In Denmark, over 90% of all cows are artificially inseminated. In Japan, over 80% of all hogs and cattle are artificially inseminated. This indicates the industry overall will increase. However, there are relatively few technicians required to service large numbers of cattle.

ADVANCEMENT

If an artificial breeding technician does an excellent job, he or she may move into a promotion job in the field or may become a distributor for an artificial insemination company. Beyond these positions, he or she may become a district or regional sales manager.

MORE ABOUT THE JOB:

The artificial breeding lab technician/inseminator collects, processes, stores, and dispenses semen taken from bulls for breeding. He or she may also help keep records and various breeding information about the bulls and cows inseminated. In larger firms, the technicians may only process and store the semen, leaving collection to a helper. In some cases, a company will start employees as "milkers" and advance them to lab work.

In order to do a good job, the lab technician/inseminator must know cattle feeding and nutrition methods which will get a volume of high quality semen. The technician may direct the feeding of the animals, although is rarely directly involved. After the semen is collected from the bull, it is analyzed briefly for number of live sperm. It is then diluted in a chemical solution and frozen. It is stored in frozen form until required for use in breeding cows.

An important part of the technician's work is accurately recording and marking information on the sperm containers. Breeding associations require detailed information before they will certify cattle as purebred and part of the technician's job may be working with breeders association records and forms.

JOB CLUSTER #1

"Agribusiness & Natural Resources"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40-	Variations exist in salaries		

A good technician/inseminator is on call in many cases - the work will vary - can earn as high as $1000-$1500 per month if considered "top notch."

HOURS OF WORK

Hours of work are likely to be fairly standard, although some Saturday work may be required.

FRINGE BENEFITS

Depending on place and length of employment, benefits provided may include:

paid vacations
sick leave
health insurance
retirement plan

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

U. S. Department of Agriculture
Washington, D.C. 20250

Department of Commerce
Washington, D.C. 20230

RELATED OCCUPATIONS:

JOB TITLE:	D.O.T.#:
Blood tests, fowls (agric.)	411.364-010
Poultry inseminator (agric.)	411.384-010
Artificial Breeding Technician	418.384-014
Farmworker, General	421.683-010

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MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: ASBESTOS AND INSULATING WORKER

An ASBESTOS AND INSULATING WORKER (PIPE COVERER AND INSULATOR) covers boilers, pipes, tanks and refrigeration units with insulating materials, such as asbestos, cork, plastic and magnesia to reduce loss or absorption of heat, prevent condensation and to deaden sound; wires prefabricated asbestos covering around steam and hot water pipes, using handtools.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Ability to make own judgment	Spatial	Good physical condition
Perseverance	Some mechanics	Normal vision and hearing
Ability to work with others	Manual dexterity	Good use of hands and fingers
Ability to adapt to new situations		Good eye-hand coordination

YOU SHOULD KNOW THAT

- much of the work of the asbestos and insulation worker is carried on at construction sites and is dirty and dusty.
- hazards include falls from ladders and scaffolding, allergic reactions and mishaps with tools.
- in order to become an asbestos and insulation worker, you must train as an apprentice.

YOU MUST BE ABLE TO

- work in all types of positions, while bending, stretching or cramped up and on hands and knees.
- work in closed areas like attics.
- work in high places and out of doors on ladders and scaffolding.
- follow written and verbal instructions closely.

DOT: 862.381-014

PREPARATION AND TRAINING:

The asbestos and insulation worker must have a high school education or its equivalent to qualify for an apprenticeship and must complete the apprenticeship program before qualifying as a journeyman.

COURSE OF STUDY IN HIGH SCHOOL

Classes should include arithmetic, mechanical drawing and all types of shop.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Nationally, employment of asbestos and insulation workers is expected to increase rapidly through the mid 1980's. Several hundred annual openings are expected because of an increase in construction activity and the need to replace those journeymen who transfer to other occupations, retire or die. Employment growth in Montana will depend upon construction activity throughout the state.

ADVANCEMENT

Qualified insulation workers may advance to jobs of greater responsibility. They may become supervisors, shop superintendents or estimators. Some open their own contracting business.

MORE ABOUT THE JOB:

Asbestos and insulation workers cover pipes, boilers, ducts and other structural parts with insulating materials to make heating and cooling systems work more efficiently and to make them more attractive and hide them from view.

Workers in the insulation industry use a number of materials. Some are asbestos, cork, sugar cane, wood, felt, aluminum foil, glass fiber, glass and rubber.

Workers must be able to use many tools including hand tools such as trowels, brushes, scissors, hammers, saws, pliers, stud-welding saws and power saws.

The materials which the worker applies are attached by nailing, wiring, pasting, taping, stud-welding, spraying and other techniques. The worker uses one or more tools in the process of applying the materials. In addition to using the above mentioned tools and materials, the worker must be proficient in the use of various pastes and cements which are used to stick materials to surfaces being insulated. The journeymen worker is capable of performing all the phases of the insulation process in many situations. The journeyman must exercise considerable individual judgment in determining which materials and methods are appropriate for specific jobs.

JOB CLUSTER #4
"Construction"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$11.78/hr Journeyman Scale		

Salaries may vary throughout the state. Union or non-union shops may differ in salary range. You may wish to consult with a local source for accurate salary information for your area.

HOURS OF WORK

The usual workweek is forty hours, Monday through Friday. Overtime is sometimes required.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

paid vacations and holidays
health insurance and retirement plans

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs. You may contact a youth representative at your local Employment Service Office.

Your state employment office can provide information on the apprenticeship programs.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information.

Insulation Distributor-Contractors National Association, Inc.
1425 Chestnut Street
Philadelphia, Pennsylvania 19102

International Association of Heat and Frost Insulators and Asbestos Workers
1300 Connecticut Avenue, N.W.
Washington, D.C. 20036

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Insultation Worker, Interior Surface	863.381-010
Insulation Installer (const.)	629.664-014
Sider (const.)	863.684-014

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: AUCTIONEER

AUCTIONEERS use their knowledge to place a value on an object, arrange the various objects in groups, ask for starting bids, describe the article and give background and history to speed the bidding, determine the highest bid and close the bidding (meaning that the object is sold to the highest bidder).

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Tactful	Verbal	See clearly
Enthusiastic	Numerical	Speak clearly
Like working with others	Clerical	Judge the distance and shape of objects
Attention to detail	Think up new ideas	Identify colors
		Use listening skills

YOU SHOULD KNOW THAT

- a license may be required.
- auctioneers may be bonded.
- auctioneers are usually self-employed.

YOU MUST BE ABLE TO

- stand on your feet for long periods of time.
- speak with a loud strong voice for hours.
- may work in crowded rooms or out in the hot sun.

PREPARATION AND TRAINING:

Most employers prefer individuals with a high school education. Helpful high school courses are mathematics, English, business, speech and drama.

On-the-job training is gained by working under an established Auctioneer.

Certain schools of auctioneering offer a period of study of 2-3 weeks duration.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

The continuing and increasing popularity of auctions may promote considerable expansion in this field.

Well trained Auctioneers are always in demand.

ADVANCEMENT

Advancement comes by increasing the number of sales.
Establishing a reputation attracts more job offers and better pay.

MORE ABOUT THE JOB:

Auctioneers, or liquidators, as they are sometimes called, manage the public or private sale of merchandise to the highest bidder.

The duties of an Auctioneer may include some of the following:

- -finding potential customers for their services.
- -appraising the total value of the potential sale.
- -developing a contract between the customer and themselves. (This establishes various fees, percentages, and other terms and conditions of the sale)
- -handling all their own advertising.
- -providing their own clerks and cashiers for the day of the sale.
- -posting terms and conditions of sale on the premises the day of the sale.
- -providing their own set-up materials - which may include selling tables, tents, and public address systems.
- -register buyers.
- -conducting the actual auction - selecting for yourself the order in which things will be sold.
- -providing buyers with itemized statements of their purchases.
- -providing $50 to $100 worth of change.
- -providing the customer with a total sales statement.

JOB CLUSTER #12

"Marketing & Distribution"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary

Most auctioneers are self-employed. Their working hours depend mainly on the demand for their services and their success. Auctioneers earnings depend on their ability, determination and ambition. They may earn from $30 to $1,000 or more for one day. However, much preparation is needed for this one day job.

HOURS OF WORK

The hours vary considerably.

FRINGE BENEFITS

Auctioneers are self-employed, therefore, any benefits will be through their management.

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

A good source of information is through a local auctioneer.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

The Auctioneer
National Auctioneers Association
135 Lakewood Drive
Lincoln, NE 68510

RELATED OCCUPATIONS:

JOB TITLE:	D.O.T.#:
Real Estate Agent	250.357-018
Buyer, Grain	162.167-010
Purchasing Agent	162.157-038
Broker's Floor Representative	162.157-014

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MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: AUDIOLOGIST

AUDIOLOGISTS specialize in diagnosing and correcting problems of hearing. They determine the range, nature and degree of an individual's hearing function and plan, direct and coordinate therapy or counseling to improve the hearing.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Desire to serve others	Verbal	Eye-hand coordination
Ability to work well with people	Numerical	Excellent speech
Patient	Some mechanical	Free of communicable diseases
Thorough		Normal vision and hearing (natural or corrected)
Tactful		
Dependable		
Emotional stability		

YOU SHOULD KNOW THAT

-many audiologists are employed by elementary and secondary schools. Additional openings exist with colleges, hospitals, research centers, governmental agencies and industry.
-you must also have a knowledge of speech problems because they are interrelated.
-if you want to work in a public school system, you may have to qualify for a teaching certificate.

YOU MUST BE ABLE TO

-get along well with others and win the trust and confidence of the people you treat.
-show patience, compassion and emotional stability when working with persons with hearing disabilities or defects.

DOT 076.101-010

PREPARATION AND TRAINING:

In most states, a master's degree in speech and hearing pathology is the minimum requirement, although a few states require only the bachelor's degree.

HIGH SCHOOL COURSES - A college preparatory major is recommended.

POST HIGH SCHOOL TRAINING - During the four-year undergraduate period, the candidate should pursue studies in anatomy, biology, physics, semantics, phonetics, child psychology and mental hygiene.

GRADUATE COURSES - Over 180 colleges and universities in the nation offer graduate instruction in courses relevant to this field. The University of Montana in Missoula offers a graduate program in this area.

ADDITIONAL FACTS ABOUT TRAINING - Many colleges offer assistantships and traineeships during which time the student can gain practical clinical experience.

SPECIAL ENTRY REQUIREMENTS

The audiologist:

- must complete at least a master's degree (5 or 6 years of post high school training);
- must qualify for a teacher's certificate if he/she wants to work in a school system;
- must enjoy working with people, helping them adjust and correct their problems.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Well trained and qualified audiologists are in demand.
Opportunities are expected to remain good through the 1980's.
Opportunities are best with school systems, colleges and universities.
Projected opportunities for Montana indicate there are not many jobs available in this area.

ADVANCEMENT

Advancement usually comes in the way of increased salary and added prestige from consultant work, special research projects and writing books and articles for professional journals.

MORE ABOUT THE JOB:

The audiologist:

works with both children and adults or may specialize in one age group;
may specialize in working with partially deaf individuals or with persons with only minor hearing impairments;
may act as consultant to educational, medical or other professional groups;
may teach or direct research in scientific projects concerned with the causes of hearing problems;
may be employed by university, hospital, public school system, community group or governmental body or he/she may be in private practice.

Duties include:

diagnosing, treating and performing research on hearing disorders;
determining the nature, range and degree of hearing functions;
planning, coordinating and directing habilitative and rehabilitative functions;
keeping records;
working with other specialists where necessary.

JOB CLUSTER #8
"Health"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$15,000-$21,000	$17,000	$15,000

Salary range for teachers is often for a 9-10 month contract. Check local area for this information.

HOURS OF WORK

Most audiologists work a forty-hour week with regular 8:00 to 5:00 hours. However, those engaged in research may work longer hours and on weekends. Normally, however, there is little or no overtime or weekend work.

FRINGE BENEFITS

Depending on length and place of employment you may receive:

retirement plan
health plan
paid vacations and holidays
life insurance
sick leave

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

State Audiologist
Department of Health
Cogswell Building
Helena, Montana 59601

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

American Speech and Hearing Association
9030 Old Georgetown Road
Washington, D.C. 20014

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Speech Pathologist	076.107-010
Speech Clinician	076.107-010
Optometrist	079.101-018
Physical Therapist	076.121-014
Hearing Test Technician	078.362-010

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: AUDIT CLERK

AUDIT CLERKS verify accuracy of figures, calculations, and postings pertaining to business transactions recorded by other workers. They examine expense accounts, commissions paid to employees, loans made on insurance policies, interest and account payments, cash receipts, sales tickets, bank records, inventory and stock record sheets, and similar items to verify accuracy of recorded data.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Neat appearance	Numerical	Average health
Dependability	Clerical	Good finger dexterity
Interest in clerical work		

YOU SHOULD KNOW THAT

- ability to operate a calculating machine is a must.
- employers want people with neat, well groomed appearances.
- you may be asked to take aptitude and mental alertness tests.

YOU MUST BE ABLE TO

- work with numbers, running swiftly and accurately over large volumes of sales receipts.
- perform simple arithmetic calculations accurately.
- adapt to a series of relatively routine duties.

DOT 210.382-010

PREPARATION AND TRAINING:

High school graduation is a requirement unless one has had prior job experience.

The audit clerk obtains speed and accuracy through on-the-job training, but school prior to employment can be an advantage in the ability to get and hold a job.

While college is not a requirement, chances of finding employment in this field are better if you have some training beyond high school.

RECOMMENDED HIGH SCHOOL COURSES:

Business Math	Business Problems	Business Machines
Bookkeeping	Typing	

Though not all these skills are needed, they will give you much greater ability to advance when job openings in related fields arise.

COURSE OF STUDY AFTER HIGH SCHOOL:

Business Math	Bookkeeping	Office Procedures
Machine Calculation	Accounting	Fundamentals of Data Processing

The potential audit clerk with hope of advancing to a supervisory position should also take such courses as personnel management, elements of supervision, and applied psychology.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

More than a million people are employed in bookkeeping and related jobs.

The number of such workers is expected to increase within the next ten years and, despite the impact of many labor saving machines, there will be a continuing need for audit clerks, bookkeepers, and accounting clerks--all related occupations.

New jobs will be created each year as the economy expands and workers quit to raise families, retire, or move up to supervisory positions.

ADVANCEMENT

The chances for a two-year college graduate to find work as an audit clerk are excellent and the clerk may advance in many ways: as a supervisor within a department; to more difficult jobs in bookkeeping; or with further education, into accounting, auditing or its related field.

MORE ABOUT THE JOB:

As an audit clerk, you will:
- check all sales tickets for accuracy;
- check and verify figures, calculations, and postings on all sales and cash reports and supporting records.

You may also:
- balance cash register tapes of daily sales;
- verify and summarize catalog order transactions;
- route sales checks to credit department employees;
- mail receipts or payments.

You should know that:
- accuracy above all is necessary;
- if you don't like working with numbers, you won't like the job;
- you must be willing to spend all day at a desk with little variation in routine;
- since audit clerks work mainly in large stores, opportunities in areas with relatively small populations are fewer than in larger cities;
- you will have a better chance of employment if your appearance is neat and well groomed.

JOB CLUSTER #3
"Business & Office"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$150-$175/wk	$160/wk	$150/wk

Salaries paid audit clerks may vary according to experience, length of time on the job, and the difficulty of the particular tasks performed for any one job.

HOURS OF WORK

Hours of work are likely to be quite regular, from 8:00 or 9:00 a.m. to 5:00 p.m. five days a week. Overtime is rare. Some firms which remain open seven days a week or in the evenings may have staggered shifts for audit clerks.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

- paid vacations
- life insurance
- employee discounts
- profit sharing plans
- health insurance
- overtime pay
- retirement plans
- sick leave

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

The Institute of Internal Auditors, Inc.
170 Broadway
New York, NY 10038

RELATED OCCUPATIONS:

JOB TITLE:	D.O.T.#:
Bookkeeper	210.382-014
Accounting Clerk	210.367-010
Cashier	211.362-010
Clerk, General	209.562-010

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MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: AUTO BODY REPAIRER

An AUTO BODY REPAIRER is a highly skilled individual whose job is to repair automobile bodies that have been damaged in any way such as accident, corrosion, etc. One may have to remove dents and repaint and replace parts that cannot be repaired.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Ability to work alone	Form perception	General good health
Pride in work	Tolerate noise	Physical stamina
Like to work with hands	Work without supervision	Good eye-hand coordination
Adept at using tools		Color perception

YOU SHOULD KNOW THAT

-most repairers learn on the job as trainees and helpers.
-you may be subject to some hazards such as burns from torches, cuts from metal, etc.
-you often work as an apprentice, advancing to journeyman.
-auto body shop personnel are sometimes unionized.

YOU MUST BE ABLE TO

-stoop, bend, crawl into small places and lift up to 75 lbs.
-tolerate noise of hammers and whir of power tools.
-tolerate dust, grease, oil, and perhaps heat, cold, and odor of paint.

DOT 807.381-010

PREPARATION AND TRAINING:

The automobile body repairer will find a high school diploma helpful. Background in industrial arts such as metalwork, auto mechanics, and other courses where you work with tools is helpful.

THE COURSE OF STUDY INCLUDES:

Auto Body	Mechanical Science	Frame Straightening
Drafting	Upholstering	Safe Practice
Metallurgy	Painting	Trade Ethics
Mathematics	Refinishing	Pride of Craftsmanship
	Wheel Aiignment	

English and Industrial Arts are also good.

Postsecondary training in auto body and fender repair is offered at the Billings Vocational Technical Center.

SPECIAL ENTRY REQUIREMENTS:

Most repairers learn through on-the-job training. Trainees must be willing to earn a lesser amount to begin with in order to learn the trade. Some previous experience with automobiles in repair either in school and/or clubs is considered valuable in obtaining employment. High school graduation is becoming important as an entry requirement.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

An automobile body repairer can find employment almost anywhere, both in small towns and in large cities.
They are in demand now and it appears they will remain in demand through the 1980's.
Increase in the number of automobiles and new freeways together with attrition of older employees provide new opportunities.

ADVANCEMENT

Advancement opportunities are limited.
Small shops provide little opportunity for advancement.
In large shops, one may become foreperson.
Some may succeed in opening their own shop.

MORE ABOUT THE JOB:

Auto body repair is a "demand" occupation.

Specific duties of an auto body repairer include:

removing dents in automobile bodies;
smoothing and filling badly dented areas;
replacing metal tops, panels; aligning body and frame;
installing window glass and windshields;
removing old parts too badly damaged to repair;
using grinders and other dressing tools;
installing new upholstery;
estimating repair jobs;
painting repaired portions of vehicles (may do complete paint job).

JOB CLUSTER #15
"Transportation"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	Journeyman worker $9.80/hr		

Salaries may vary throughout the state. Check a local labor union or other source for salary information in your area.

HOURS OF WORK

Most work a forty hour week. Some overtime is required.

FRINGE BENEFITS

Depending in length and place of employment, you may receive:

paid holidays and vacations
health insurance
life and accident insurance

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

For further information, check with your local automotive repair shop or dealer or union office.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Automotive Service Industry Association
230 Michigan Avenue
Chicago, Illinois 60601

National Automobile Dealers Association
2000 K Street N.W.
Washington, D.C. 20006

Automotive Service Councils of America, Inc.
4001 Warren Blvd.
Hillside, Illinois 60162

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Office Machine Serviceperson	633.281-010
Primp Service Person	637.281-010

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: AUTOMOBILE MECHANIC

The AUTOMOBILE MECHANIC repairs, diagnoses problems and does preventative maintenance on automotive vehicles. A MECHANIC, in trying to prevent breakdowns, examines autos periodically, and adjusts, replaces, cleans or repairs parts. When attempting to diagnose the trouble, a MECHANIC gets a description of the symptoms and uses various testing devices to locate the defect. In all that is done, an AUTOMOBILE MECHANIC must be quick and accurate to avoid lost effort and time. A MECHANIC may specialize in a certain area of mechanics.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Pride in work	Mechanical ability	Good health
Honesty	Verbal ability	Physical stamina
Dependability		Have normal or corrected vision and hearing
Willingness to work hard		Good finger dexterity
Accurate		
Intelligent		

YOU SHOULD KNOW THAT

- -many employers insist on employees with technical school background.
- -you will be expected to work hard and long when the need arises.
- -you must work in the midst of dirt, grease, and oil.
- -you must often work in awkward positions.
- -shops are usually well heated, lighted, and ventilated.
- -there is an opportunity to work with people.

YOU MUST BE ABLE TO

- -use eyes for close work.
- -reach for and handle heavy equipment.
- -communicate with people.
- -tolerate gas, oil, and grease on hands, arms, face, and clothes.

DOT 620.261-010

PREPARATION AND TRAINING:

Although many auto mechanics learn their trade through on-the-job experience, present aspirants for a career in this field will be handicapped unless they have taken advantage of the many pre-apprentice programs available in high school or vocational technical schools.

Automobile Mechanics I and II are offered at:

Billings Vocational Technical Center
Butte Vocational Technical Center
Helena Vocational Technical Center
Miles Community College
Northern Montana College

NOTES:

Junior college or vocational education may be helpful, although it may not be required. Most education in the auto parts area comes from on-the-job training.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities are increasing for people with trade school experience in auto repair.
Demand is increasing for specialists due to the autos becoming complicated.
The well-trained auto mechanic is much in demand.
Opportunities exist with car dealer service departments, independent auto repair shops, organizations maintaining their own fleet of cars and with manufacturers.

ADVANCEMENT

Mechanics may advance to supervisor; in large shops, foreperson or service manager. May also acquire or operate his/her own repair shops or service stations.

MORE ABOUT THE JOB:

The automobile mechanic works hard and long when the need arises.

Specific duties of the auto mechanic may include:

- preventive maintenance
- diagnosing breakdowns
- making necessary repairs

Auto mechanics may specialize in:

- automatic transmissions
- front end alignment
- replacing auto glass
- auto electrical systems
- engine tune-up
- brake repair
- repairing radiators

Most mechanics are specialized but when need arises are able to handle all types of repairs. A general background is required.

JOB CLUSTER #15
"Transportation"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40		Journeyman Mechanic	$9.68/hr

Salaries may vary throughout the state and also may depend upon whether the shop is union. Check a local source for accurate information in your area.

HOURS OF WORK

Forty to forty-eight hours per week. You may be required to work more hours if a backlog of work develops.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

- health insurance
- holiday and vacation pay
- life and accident insurance
- retirement plan
- laundered uniforms furnished free
- buy parts at wholesale for personal vehicle
- have use of facilities for repairing personal vehicle

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Check with your local automotive repair shop or automobile dealer for further information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Automotive Service Industry Association
230 N. Michigan Avenue
Chicago, Illinois 60601

Automotive Service Council of America
4001 Warren Blvd.
Hillside, Illinois 60162

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Coin Mechanic	639.281-014
Motorcycle Mechanic	620.281-054
Aircraft Mechanic	621.281-014
Farm Equipment Mechanics	624.281-010

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: AUTO PARTS SALESPERSON

An AUTO PARTS SALESPERSON sells spare and replaceable parts and equipment from behind counter in agency, repair shop, or parts store; ascertains make, year and type of part needed; inspects damaged part to determine part required or advises customer of part needed according to description of malfunction; discusses use and features of various parts, based on knowledge of engines, machinery, or equipment; reads catalog for stock number, price and replacement parts; advises customer on substitution or modification of part when replacement is not available.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Ambition	Ability to work under pressure	Good general health
Tact	Ability to take orders and carry them out	Must be able to do light lifting
Good memory	Must be able to become knowledgeable through memorization	
Pleasing personality		
Even temper		
Cleanliness		

YOU SHOULD KNOW THAT

The emphasis on this job is to service customers.
The counter salesperson should be knowledgeable about parts and the use of the parts catalogs, microfilm readers, and numbering systems.
You should be capable of dealing intelligently with customers both in person and on the telephone.
Parts salespersons employed by some auto agencies and wholesale parts houses are union members.
The parts salesperson is not required to install parts.

YOU MUST BE ABLE TO

Sell parts to wholesale and retail customers.
Clean, revise, and update parts displays as directed.
Check credit requests versus status lists.
Prepare and price out parts invoices, properly identifying eligible wholesale customers.
Assist in updating parts catalogs and/or microfilm readers with periodic changes.
Help maintain parts stock in orderly condition.

DOT 279.357-062

PREPARATION AND TRAINING:

Most employers require a minimum of a high school education. The shipping and receiving clerk is usually the starting job for one to work his/her way up to the counter salesperson position. Actual on-the-job training guided by an experienced person is the basic training. The new employee receives explanation of duties and responsibilities; and a careful check on progress is kept. Some formal training is available through group or department meetings and correspondence courses.

RECOMMENDED HIGH SCHOOL COURSES

- Auto Shop
- Arithmetic
- Bookkeeping
- Speech

SPECIAL ENTRY REQUIREMENTS

General knowledge of the parts operation along with experience from working in other areas of the parts department or store.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

There is an increase in number of jobs available as an auto parts person in the next few years. More jobs are available in urban areas.

ADVANCEMENT

Parts people usually start at a lower level, such as delivery. They may be promoted to assistant parts managers after achieving the level of parts sales person. Another alternative for promotion is the establishment of one's own parts business.

MORE ABOUT THE JOB:

Job responsibilities may include:

-asking customers about needed parts.
-checking with parts catalogs to find part number.
-examining part, if customers have it with them.
-locating part in stockroom.
-writing out sales receipt and packaging item.
-ordering from manufacturer, suggesting substitute parts.
-referring customer elsewhere if part isn't in stock.
-restocking shelves and bins where parts are located.
-taking inventory of stock; ordering new parts.
-maintaining sales records.
-using special equipment to measure parts or determining if part is defective.

JOB CLUSTER #12

"Marketing and Distribution"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$800-$1100/mo.		$800/mo.

Because of varying rates of pay throughout Montana, specific information on salaries may be obtained at your nearby employment office.

HOURS OF WORK

The forty-hour work week is common; however, some agencies work Saturday mornings. Others work evenings and stagger shifts.

FRINGE BENEFITS
Depending on place and length of employment, you may receive the following:

Major medical insurance plan
Retirement benefits
Industrial Accident benefits
Paid vacations and holidays

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

For further information, check with your local automotive parts dealer.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Automotive Service Industry Association
168 North Michigan Avenue
Chicago, Illinois 60601

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Sales Rep., Foundry and Machine Shop Products	274.257-010
Sales Rep., Auto Accessories	273.357-030
Sales Rep., Railroad Equipment and Supplies	273.357-026

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: AUTOMOBILE SALESPERSON

The AUTOMOBILE SALESPERSON solicits customers and attempts to sell them cars and trucks. When working for smaller dealerships, they usually sell both new and used automobiles. In large dealerships, they generally specialize in one or the other. Many times after a sale, a follow-up is required, either personally or by telephone calls. The Salesperson is expected to convince the customers that their agency gives the fairest deal and the best service.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Honest	Able to communicate freely and openly	Good general health
Dependable	Do basic mathematics	Good vision & hearing
Ambitious	Clerical ability	Be able to spend considerable time on your feet
Persuasive		
Tactful		

YOU SHOULD KNOW THAT

- -commissions earned may vary from month to month, and you will have to plan on some lean months on occasion.
- -being at ease with people (and making them at ease) is the key in this selling job.
- -while most of the employees in this profession are over 30, there are opportunities for young workers who can demonstrate ability and poise.
- -truck sales represent 50% of the vehicle sales and provide greater commissions.

YOU MUST BE ABLE TO

- -express yourself clearly and be friendly and courteous at all times.
- -be enthusiastic about your product.
- -be tolerant and patient since you will be dealing with all kinds of people and many sales will be difficult to make.

DOT 273.353-010

PREPARATION AND TRAINING:

While there is no formal minimum schooling, many employers require a high school diploma.

RECOMMENDED HIGH SCHOOL SUBJECTS:

Reading	Writing	Arithmetic
Speech	Salesmanship	Auto Mechanics
English		Debate

Some employers prefer salespersons with some college training, but it normally is not required. Some agencies offer special courses in sales techniques but most training is on-the-job. There are a few agencies that will hire inexperienced salespersons if they have good qualifications, but most will hire only experienced salespersons.

The ability to listen is important.
You should be able to ask questions and then listen for answers that will help you to close a sale.

The most highly successful car and truck salespersons are very active in church, fraternal, service, sports and civic organizations. Many hold offices in clubs and organizational boards.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

As the population increases, personal income increases, and the trend toward multi-car ownership grows, more agencies will open and more openings for salespersons will be available. Sales usually increase during prosperous periods and remain fairly stable during general economic slumps.

ADVANCEMENT

A salesperson's outstanding success in the sales department often guarantees promotion when an opening occurs in managerial and executive positions. Most salespersons consider increased earnings as a promotion. A salesperson may become a dealer or head of an agency, but this calls for considerable investment of capital.

MORE ABOUT THE JOB:

The automobile salesperson spends much time waiting on customers in the dealer's showroom or used car lot. After greeting a customer, he/she finds out the kind of car customers have in mind and the features that interest them most. The salesperson emphasizes the points that will satisfy the customer's needs and stimulates their desire to buy.

Before the salesperson approves delivery of the car, he/she insures that it has been properly serviced and has the accessories specified by the customer.

Automobile salespersons develop and follow leads of prospective new customers by checking such sources as automobile registration records, dealer sales, service and finance records, gasoline service station operators, parking lot attendants, barbers, and others whose work brings them in contact with large numbers of people.

Since many customers find it more convenient to shop after work, salespersons frequently work evenings, Saturdays, and Sundays.

In addition to persuading a customer to buy, the salesperson:
- -computes total sales price;
- -determines trade-in allowance
- -obtains credit information;
- -prepares sales contract;
- -presents sales agreement to manager or dealer for approval.
  (If agreement is not acceptable, salesperson must be able to return to customer and obtain a sales order that will be approved by the management.)

JOB CLUSTER #11
"Marketing & Distribution"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary

The amount of money the automobile salesperson earns varies greatly and is dependent on several factors; some salespersons earn salaries plus commissions while some others work on straight commission. A starting salesperson may earn about $800 to $1000 per month plus bonuses.

HOURS OF WORK

Hours of work are likely to be somewhat irregular. The salesperson normally works six days a week. Since the salesperson's initiative is in large measure responsible for his/her success, he/she will work long hours. Normal hours are 8 a.m. to 6 p.m. Some work nights or weekends. Most follow-up work is done after 6 p.m.

FRINGE BENEFITS

Depending on length and place of employment, you may receive the following:

bonus plans	insurance	award prizes
free demonstrator	sick leave	award trips
free gasoline allowance	paid vacation & holidays	
car maintenance	health and life insurance	

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Talk to your local new or used car salesperson, dealers and sales managers.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

National Automobile Dealers Association
2000 K. Street, N.W.
Washington, D.C. 20006

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Aircraft Sales Representative	273.253-010
Automobile Accessories Salesperson	273.357-030
Boats and Marine Supplies Sales Representative	273.357-018
Office Machines Sales Representative	375.357-034

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: AUTOMATIC TRANSMISSION MECHANIC

The AUTOMATIC TRANSMISSION MECHANIC repairs transmissions in cars, trucks, buses, and other vehicles; he/she may be designated, according to experience and training, as cleaner, removal and replacement person or transmission builder.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Mature	Mechanical	Good general health
Dependable	Numerical	Normal vision and hearing
Thorough	Ability to visualize arrangements and relationships	Eye-hand coordination
Pride in workmanship	Finger dexterity	Ability to lift heavy objects
Ability to get along with others		

YOU SHOULD KNOW THAT

-a general knowledge of the overall functioning of a vehicle is vital.
-you will be expected to work long and hard when the need arises.
-it takes two to four years of training to become a fully qualified transmission mechanic.
-employers provide on-the-job supervised training for a new employee, although some technical school training is preferred.

YOU MUST BE ABLE TO

-use eyes in close work.
-pay attention to detail.
-lie in awkward or cramped positions for extended periods.
-tolerate gas, oil, grease, and dirt on your hands, arms, face, and clothes.
-get along well with others, including customers and fellow workers.

DOT 620.281-062

PREPARATION AND TRAINING:

A high school education is now required by most shops in the preparation for this job, especially by the larger ones. Additional training at the postsecondary level is not required, but may be of great help to the candidate hoping to advance rapidly.

Most employers give on-the-job training and ask employees to serve a four year apprenticeship. Most employers prefer candidates who can demonstrate a knowledge of general mechanics and who have some experience with general automotive repair.

HIGH SCHOOL COURSES:

English	mathematics
auto shop	machine shop

COURSES AFTER HIGH SCHOOL:

auto shop	machine shop	automotive electrical systems
metal shop	welding	automotive mechanics

SPECIAL ENTRY REQUIREMENTS:

The transmission mechanic candidates:

may enter the field with no formal training as a trainee;
will be required to provide their own tools;
may be required to attend formal classes in transmission mechanics;
must complete either formal training, apprenticeship, or on-the-job preparatory program to qualify for a transmission mechanic.

PROSPECTS AND OPPORTUNITIES:

JOB AVAILABILITY TRENDS

Turnover in this job is relatively low.
Opportunities are good and are expected to increase as the number of vehicles equipped with automatic transmissions continue to grow.
Opportunities are best in large urban areas.

ADVANCEMENT

The beginning transmission mechanic, usually called a transmission cleaner, can advance to:

removal and replacement person
transmission builder
} normally the same person
shop foreperson
shop manager
shop owner

MORE ABOUT THE JOB:

The automatic transmission mechanic can be a transmission cleaner, a removal and replacement person, or a transmission builder.

The transmission cleaner:

- -uses a hose of hot steam to clean transmissions and transmission parts after they have been removed from the auto.
- -may steam clean outer surface of the engine.
- -may perform some janitorial duties such as cleaning the shop floor.

The removal and replacement person:

- -is concerned only with removal and replacing the automatic transmission using hand tools and equipment such as a jack and hose.
- -removes the transmission from the vehicle and delivers it to the transmission builder.
- -after the builder has repaired the transmission, replaces it in the vehicle securing it in place, replacing defective or worn bolts or clamps.
- -does safeguard services such as changing the transmission oil.

The automatic transmission builder:

- -disassembles transmission units, checks for malfunctions, replaces worn or broken parts, adjust parts such as pump, band and gears, adjusts operating linkage, test drives vehicle on road.
- -meets with customer and explains what was done and the cost.

JOB CLUSTER #15
"Transportation"
SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40-48	Journeyman Transmission Mechanic	$9.68/hr	

Salaries may vary throughout the state and also may depend upon whether the shop is union. Check a local source for accurate information for your area.

HOURS OF WORK

Generally an eight hour day, five or six days a week is normal. Many shops work on a five and one-half day week.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

life insurance medical coverage furnished uniforms

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

For more information, check with your local automotive repair shop.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Automotive Services Industry Association
230 North Michigan Avenue
Chicago, Illinois 60601

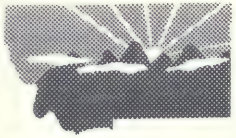
National Automobile Dealers' Association
2000 "K" Street, N.W.
Washington, D.C. 20006

Montana Automobile Dealers's Association
501 North Sanders
Helena, Montana 59601
406-442-1233

RELATED OCCUPATIONS:

JOB TITLES:	D.O.T.#:
Automobile Mechanic	620.281-010
Motorcycle Mechanic	639.281-054
Aircraft Mechanic	621.281-014
Farm Equipment Mechanic	624.281-010

D.O.T. Fourth Edition, page 538



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: AUTOMOBILE UPHOLSTERER

The AUTOMOBILE UPHOLSTERER repairs or replaces upholstery in automobiles, trucks, buses, motorcycles and boats. Old upholstery, including carpeting, seat covers, padding and door panels, is removed and repaired or replaced. Using a variety of hand and machine tools convertible tops are also repaired or replaced.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Responsible	Mechanical	Normal health
Pride in work	Numerical	Normal vision (natural or corrected)
Thorough	Spatial perception	Eye-hand coordination
Neat	Form Perception	Finger dexterity
Creative		Ability to work standing, sitting, kneeling, bending and lying
		Ability to discern colors and shades

YOU SHOULD KNOW THAT

- -thoroughness and pride in work are necessary prerequisites for this job;
- -most employers give on-the-job supervised training in the skills needed in this occupation;
- -you must serve an apprenticeship period.

YOU MUST BE ABLE TO

- -learn and apply craft techniques, processes and principles;
- -learn to use a variety of hand and power tools to perform the various tasks;
- -apply shop mathematics to your work when computing dimensions and measuring;
- -have spatial and form perception when designing, making or altering upholstery;
- -tolerate a warm shop in the summer and a cool one in the winter;
- -bend, stoop, kneel and crawl when taking measurements and making fittings.

D.O.T. 780.381-010

PREPARATION AND TRAINING:

A high school education or its equivalent is required. Training in a high school or technical school will be very helpful to the candidate seeking the best job. A candidate with some technical training usually serves a somewhat shorter apprenticeship period.

Most employers provide on-the-job training, but any experience working with cloth is helpful.

RECOMMENDED HIGH SCHOOL SUBJECTS: English, Math, Upholstery (if offered), Sales techniques, Sewing

SPECIAL ENTRY REQUIREMENTS

You may be required to have a valid driver's license if the employer has a pick up and delivery service.

Previous experience in furniture repair and upholstery would be helpful.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities for employment are good.
Opportunities are best in large urban areas.
Growth in the trade will provide a few openings as more automobiles are sold and with the increase in demand for truck cushions, tarpaulins, boat covers and boat seats.
Most openings will occur from experienced workers who die or retire or leave the occupation.

ADVANCEMENT

Advancement opportunity is somewhat limited since most upholstery shops are small and many are managed by the owner.
In large shops, advancement may be to shop supervisor.
Many upholsterers go into business for themselves after they have acquired the skills and saved the capital.

MORE ABOUT THE JOB:

Automobile trimmers are skilled upholsterers who:

-make covers for automobile seats, floors and door panels, and also convertible tops and other items;
-determines the dimensions of each piece of vinyl, leatherette, broadcloth or other material to be used;
-marks the material for cutting and must make allowances for pleats, seams, shrinkage and stretching;
-follows standard designs or follows original design specified by customer;
-cuts and fits pieces together, then stitches together using a heavy duty sewing machine;
-stitches, pulls, staples, tacks, glues and in other ways fits the finished pieces properly into place;
-also makes truck and boat cushions, tarpaulins and boat covers;
-repairs upholstery that has been cut, burned, torn or damaged in other ways.

You may work on:

- custom upholstery
- vehicle seat coverings
- vehicle carpeting
- vehicle tops
- motorcycle seats
- boat upholstery, tops
- truck camper upholstery

JOB CLUSTER #10

"Manufacturing"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$7.20/hr	$5.85/hr	$4.25/hr

Salaries may vary throughout the state. Check a local source for current information in your area.

HOURS OF WORK

The automobile upholsterer generally works a standard eight-hour day, five days a week. There is little weekend or overtime work.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

- social security
- medical insurance
- disability insurance
- paid vacations and holidays

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Montana State Apprenticeship Council
Department of Labor
1336 Helena Avenue
Helena, Montana 59601

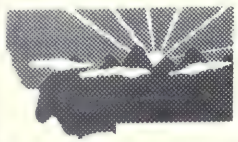
ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

National Association of Auto Trim Shops
129 Broadway
Lynbrook
Long Island, New York 11563

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Furniture upholsterer	780.381-018
Slipcover cutter	780.381-030
Upholsterer, inside	780.681-010



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: BAGGER (GROCERY PACKER)

The BAGGER bags groceries in a sack or carton and carries or pushes groceries in a cart to the customer's car. A bagger collects shopping carts from parking lots and surrounding areas and returns carts to the store. The bagger also replaces cleaning and wrapping supplies used at a food checkout counter and cleans the work area and carries empty bottles and trash to the storeroom. May price and stack food articles on shelves.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Courteous	Work while standing constantly	Good physical strength and stamina
Pleasant	Lift up to 50 pounds	Good eye-hand coordination
Tolerant	Work rapidly	Good vision and hearing (normal or corrected)
Cooperative	Be courteous despite customer irritations	Full use of arms, hands, legs and feet
Social		

YOU SHOULD KNOW THAT

- the job is not usually a career job, but may lead to a career in grocery store operations;
- working conditions are usually pleasant;
- baggers are subject to strains from lifting and carrying heavy bags;
- personal qualities of neatness, sincerity and dependability are important;
- there may be a minimum age for working in your state.

YOU MUST BE ABLE TO

- work while standing constantly;
- perform lifting and carrying tasks with weights up to 50 pounds;
- work extremely rapidly at times;
- maintain your courteous, polite manner at all times regardless of whether customers are friendly or not.

D.O.T. 920.687-014

PREPARATION AND TRAINING:

Baggers must usually have at least an eighth grade education. They often are attending high school or college and working as baggers on a part-time basis.

RECOMMENDED HIGH SCHOOL SUBJECTS: No specific major is recommended. Those who desire grocery work as a career should include arithmetic. Bookkeeping and other business courses will help.

Brief instruction and proper bagging and other store procedures are given on the job. You will be paid the beginning wage while training.

ADDITIONAL FACTS ABOUT TRAINING

Basic requirements can be met by most youth. Therefore, it is important that such things as personal appearance, attitude, desire for work and reliability are shown to the best of your ability when applying for jobs as baggers. Work experience of any kind is valuable for the applicant. You may be required to join a union at the time you are employed. Many jobs are part-time with hours arranged around school schedules.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities exist in cities and towns of all sizes throughout the state.
Baggers are employed in greatest numbers by large food markets.
The number of baggers will continue to grow, especially in urban areas.

ADVANCEMENT

Most baggers do not advance but go into other occupations.
Those interested in careers in food store operation find that working as a bagger while in school is an excellent way of getting started.
Baggers or clerk's helpers are in good positions to receive training on cash registers and in other aspects of the food clerk's duties.

MORE ABOUT THE JOB:

Baggers assist food clerks and other store workers in moving purchased groceries out of the store in an orderly and regular fashion.

They may perform additional duties as assigned.

Standard tasks performed by baggers are:

-puts groceries in bags properly to avoid damage and insure the good condition of all the items inside;
-in some stores, carries bags of groceries to customer's car;
-in some stores, arranges bags in cart for customers to push out of store;
-collects carts from outside the store and replaces them inside for use by customers;
-replaces bags and other supplies used at checkout counters;
-cleans spilled articles and other things as required;
-stacks marked items on shelves;
-performs additional duties by direction.

JOB CLUSTER #13

"Personal Services"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
10-40	$3.10-3.60/hr	$3.25-3.50	$3.10/hr

Salaries may vary throughout the state. A local source should be checked for accurate salary information for your area.

HOURS OF WORK

Hours number from ten to more than twenty per week. Work is often performed in the afternoons and evenings. Weekend work is normal.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

paid vacation
health and welfare plan
premium paid for overtime worked
retirement plan

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs.
You may contact a youth representative at your local Employment Service Office.

Check with your local food store for further information.

ADDITIONAL SOURCES OF INFORMATION:

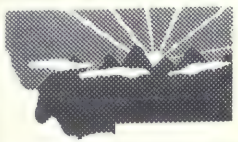
Your school counselor and librarian may also help you find additional information.

Retail Clerks International Association
Connecticut Avenue and DeSales Street
Washington, D.C. 20006

National Association of Food Chains
1725 I Street, N.W.
Washington, D. C. 20006

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Packager, hand (any industry)	920.587-018
Laundry bagger	920.687-018
Crate liner	920.687-078
Cardboard inserter (hoisery)	920.687-062



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: BAKER

The BAKER mixes and bakes foods according to recipes to produce bread, pastries, puddings and other baked goods.

Potential bakers start out as baker's helpers, then advance to baker's apprentices.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Willingness to perform hard labor	Work without direct supervision	Good general health
Neatness & personal cleanliness	Numerical	Physical stamina
Attention to detail	Some mechanical	Strong arms, legs & back
Thoroughness		Good sense of taste & smell
Pride in work		Normal eye-hand coordination
Neat work habits		Good eyesight & hearing
Pleasing personality		Able to lift & carry up to 100 pounds
		Free of communicable disease

YOU SHOULD KNOW THAT

-union membership is sometimes required;
-you may be required to begin work early in the day;
-you may work as an apprentice before becoming a fully qualified baker;
-you should prefer situations involving routine organized work;
-a journeyman baker should be able to do anything in the bakery.

YOU MUST BE ABLE TO

-follow written, oral and scheduled instructions;
-work irregular hours and stand extremes in temperature;
-obtain a health certificate indicating you are free from communicable diseases;
-use simple math to figure recipes and ratios of ingredients;
-manage your work in order to save steps.

D.O.T 526.381-010

PREPARATION AND TRAINING:

High school graduation is not a specific educational requirement for those who wish to become bakers, but owners and superintendents of bakeries agree that advancement comes more easily with a diploma. The best advanced training is on-the-job.

Billings Vocational Technical Center offers a course in food preparation and services.

RECOMMENDED HIGH SCHOOL SUBJECTS:
- Food Service
- General Math
- Chemistry
- English
- Home Economics
- Bacteriology
- Speech
- Retailing

Many workers acquire baking skills by learning the trade in the armed forces. Most training is received on the job and efficiency can be achieved anywhere from three months to three years depending on tasks and place of employment.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

There is most always a shortage of bakers all over the U.S.
Bakers are usually employed in large wholesale or retail bakeries, specialty shops or chain bakeries owned by grocery chains.
Opportunities are best in large metropolitan areas.

ADVANCEMENT

Bakers who show aptitude for the job, become efficient and show a wish for advancement can become: journeyman (skilled worker), bakery manager, supervisor in industrial bakeries, owners of wholesale stores.

MORE ABOUT THE JOB:

Bakers may:

-measure flour, sugar, shortening and other ingredients to prepare batter, dough, filling or icings;
-dump ingredients into mixing machine, bowl or steam kettle to mix or cook according to specifications;
-roll, cut and shape dough to form sweet rolls, pie crust, tarts, cookies, cakes and related products preparatory to baking;
-place dough in pans, molds or on sheets and bake in an oven;
-observe color of products being baked and turn thermostat or other control to adjust oven temperature;
-apply glaze, icing or other toppings to baked goods using spatula or brush;
-specialize in baking one type of product such as breads, rolls, pies, donuts or cakes;
-keep utensils clean and in working order as well as a spotless work area;
-select and requisition bakery supplies and equipment;
-stand and stoop for long periods of time, bend, reach and lift;
-decorate cakes (training in cake decorating, both simple and elaborate, is valuable to the baker).

JOB CLUSTER #13

"Personal Services"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40-48	Journey workers $175-300/wk		

Salaries may vary throughout the state. Check your local bakery or bakery union for accurate salary information for your area.

HOURS OF WORK

The hours of work for a baker are quite irregular. They usually go to work early in the morning to prepare for the day's demand of fresh quality baked goods. Saturdays are generally work days and Sundays are worked in some stores to prepare for Monday morning or in the case that the store is opened for business on Sunday. Evening work is often required.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

retirement plan	health plan	overtime pay
profit sharing	life insurance	night premium
paid holidays & vacations	time & one-half for Sunday work	

VV10579

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs.
You may contact a youth representative at your local Employment Service Office.

Montana Apprenticeship Council
Department of Labor
1331 Helena Avenue
Helena, Montana 59601

or

A bakery manager in your area

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information.

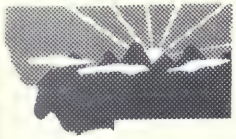
Bakery and Confectionery Workers
International Union of America
1000 16th Street, N.W.
Washington, D.C.

American Bakers Association
20 North Wacker Drive
Chicago, Illinois 60606

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Pie maker	526.685-038
Bakery supervisor	526.131-010
Doughnut maker	526.684-010

D.O.T. Fourth Edition, page 348



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: BAKER'S HELPER

The BAKER'S HELPER assists all-around bakers and specialized bakery workers.

The helper performs jobs such as greasing pans, removing bread from pans and washing equipment. Most work is routine and largely unskilled.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Ability to follow instructions	Numerical	Good general health
Adaptability to routine work	Spatial	Physical strength
Dependable	Mechanical	Ability to lift heavy objects
Neat	Finger dexterity	Free of communicable diseases
Ability to work with others		
Clean		

YOU SHOULD KNOW THAT

-there are formal apprenticeship programs available;
-working conditions are often hot and uncomfortable;
-most workers belong to a union;
-you must pass a health examination;
-a baker's day begins early in the morning.

YOU MUST BE ABLE TO

-work with machines carefully and quickly;
-follow directions;
-do medium to heavy lifting and carrying;
-get along with co-workers;
-learn to perform relatively routine tasks.

DOT 526.686-010

PREPARATION AND TRAINING:

Most employers prefer to hire people who have graduated from high school. Although it is not necessary to have a high school diploma, employers will hire those with a diploma before considering those without.

All tasks for baker's helper can be learned on the job. Training for a baker's helper is brief; however, a longer time is required to become a skilled, all-around baker.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Employment prospects in the baking industry are expected to hold stable in the next ten years.
Openings are available because of the need to replace workers who retire, die or transfer; but increased automation and increased production methods in the baking field are expected to offset the growing demand for bakery products.
Total employment of bakery helpers is likely to decline slightly because more and more machinery is being used.

ADVANCEMENT

Most bakeries have an apprenticeship program so that helpers can become skilled bakers with a higher salary.
In some small bakeries, an industrious and capable baker's helper may be promoted to baker and then to skilled laborer without going through a formal apprenticeship program.

MORE ABOUT THE JOB:

The bakery helper assists in many of the baking operations from running machines to washing pans.

The helper may be asked to:

-work the oven, putting bread in the oven and taking it out;
-work as a mixer, combining ingredients in a blending machine;
-work on the wrapping machine, running bread through a slicer and wrapping machine;
-do such jobs as greasing pans, removing bread from pans, pushing troughs and racks and washing pans and equipment;
-move and distribute supplies around the bakery and help load delivery trucks;
-do almost everything a baker does only under supervision.

The baker's helper should know that:

-a few days of on-the-job training is all that is necessary;
-more experienced workers run the machines while the beginners wash up or load supplies;
-you must be willing to work at a routine job with little variation;
-union membership is usually required.

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$140-200/wk	$140-180/wk	$140/wk

Salaries may vary throughout the state. Check your local bakery or union for accurate salary information for your area.

HOURS OF WORK

Most workers put in a forty-hour week. There is night and weekend work.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

paid vacation	sick leave	health insurance
overtime pay	retirement plan	

VV10579

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs.
You may contact a youth representative at your local Employment Service Office.

Check with your local bakery for more information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information.

Bakery and Confectionery Workers
International Union of America
1000 16th Street, N. W.
Washington, D. C.

American Bakers Association
20 North Wacker Drive
Chicago, Illinois 60606

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Pie maker	526.685-038
Baker	526.381-010
Doughnut maker	526.684-010

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MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: BANK OPERATIONS TRAINEE (D.O.T. LOAN OFFICER)

The BANK OPERATIONS TRAINEE learns operations in all phases of banking as an eventual step toward becoming a commercial loan officer, operations officer, assistant manager, or finally manager of a branch.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Like working with people	Verbal	Average health
Neat appearance	Clerical	Average vision and hearing (natural or corrected)
Like business and math	Numerical	
Dependable		
Trustworthy		

YOU SHOULD KNOW THAT

-there are opportunities for both the high school and college graduate;
-you will not be considered for the position if you have any kind of a criminal record;
-your character references must withstand a close check.

YOU MUST BE ABLE TO

-learn the banking business from the bottom up;
-do basic math calculations with the aid of business machines;
-get along well with people, both co-workers and customers;
-learn the elements of installment and commercial lending, clerical procedures, credits and debits.

D.O.T. 186.267-018

PREPARATION AND TRAINING:

High school graduation is the minimum in all banks. Most prefer (and some require) that you have two years of college. The operations trainee with two or four years of college stands a better chance of advancing more rapidly. You will receive on-the-job training.

RECOMMENDED HIGH SCHOOL SUBJECTS:	Mathematics	Business Machines
English	Government	Typing
History	Economics	Bookkeeping or Accounting
Social Studies		
COURSE OF STUDY AFTER HIGH SCHOOL:	Economics	Personal Management
	Psychology	Accounting
	Management Procedures	Speech
	Business Law	Merchandising
	English	Data Processing

SPECIAL ENTRY REQUIREMENTS

You must be bondable.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities for employment and advancement are best in larger banks, generally located in cities with 50,000 or more population.
Because of increases in sales and in the use of banking services, there has been a large increase in the number and size in banks over the past twenty-five years.
About one in every six employees is a bank officer so the prospects for the operations trainee appear excellent.

ADVANCEMENT

The operations trainee can advance to more responsible positions rather rapidly. If interests and abilities so indicate, he/she may move into a specialty, such as installment loan officer or commercial loan officer.

The trainee which shows initiative and ability can usually become a small branch manager in five to ten years.

MORE ABOUT THE JOB:

Many bank officers begin as operations trainees. This is the position which bankers use to train capable young men and women in the varied aspects of banking with an eye toward eventual promotion into management. Not all trainees become bank managers. Many become loan officers, operations officers or take other professional positions within the industry.

The operations trainee may be part of a formal training program. However, the normal procedure is for the trainee to start in a teller's cage and then as his/her interests and ability indicate, move into various other departments of the bank until his/her skill and experience qualify him/her to become an assistant operations officer or junior loan officer.

Job duties for the trainee will vary with different banks.

Throughout his/her entire assignment, the operations trainee is expected to learn all he/she can about bank policies and procedures. He/she is constantly learning about the banking industry in particular, and economics and business as a whole. The trainee who advances most rapidly is the one who can show his/her understanding of banking and economics - regardless of schooling.

Trainees have a great deal to say about their own future. They may indicate in which area they are most interested and their training may be geared to place them in a professional position in keeping with those desires.

JOB CLUSTER #2

"Business and Office"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$750-1,200/mo	$900/mo	$750/mo

Because of varying rates of pay throughout Montana, specific information on salaries may be obtained at your nearby employment service office or a local bank.

HOURS OF WORK

The workweek is standard, usually 8:30 a.m. to 5:00 p.m., Monday through Friday. Weekend work is rare as is overtime.

FRINGE BENEFITS

Depending on place and length of employment, you may receive the following:

paid overtime	health insurance	sick leave
paid vacations	retirement plan	

VV10579

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Contact the personnel manager of your local bank.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

American Bankers Association
Personnel Administration and Management
Development Committee
1120 Connecticut Avenue N.W.
Washington, D.C. 20036

National Association of Bank Women, Inc.
National Office
111 East Wacker Drive
Chicago, Illinois 60601

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Credit Union manager	186.167-026
Insurance office manager	186.167-034
Property manager (real estate)	186.167-046

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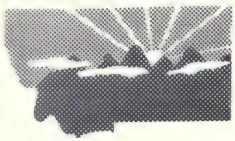

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: BANK RECONCILIATION CLERK

BANK RECONCILIATION CLERKS handle the paper work associated with depositors' checking and savings accounts, loans to individuals and business firms and other banks.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Stable emotions	Clerical	Good vision (natural or corrected)
Good judgment	Numerical	Normal hearing
Discretion	Accurate with figures	Good physical health
Integrity	Work under pressure	Good eye-hand coordination
Courtesy and tact		Full use of both hands.
Accurate		

YOU SHOULD KNOW THAT

- -you may have to work in the evenings at least once a week when banks remain open for business;
- -overtime work may be necessary during peak periods, often at the end of the month;
- -clerks who do some kinds of check processing may be employed on evening and night shifts;
- -you will not be employed if you have been convicted of a crime. Within the past seven years this holds true in all aspects of banking.

YOU MUST BE ABLE TO

- -work for long periods while sitting or standing;
- -use your eyes constantly;
- -concern yourself with detail;
- -work under pressure during rush periods;
- -be accurate with figures.

DOT 216.382-018

PREPARATION AND TRAINING:

Graduation from high school or business school is generally required for most beginning bank clerk jobs. Some college, while not required, is always recommended.

Some banks train their workers on the job and pay them a trainee's wage until they reach a certain level of proficiency.

For bank reconciliation clerks who operate calculating, key punch and tabulation machines, several weeks of training is usually required.

RECOMMENDED HIGH SCHOOL SUBJECTS:

Typing	Clerical Procedures
Office Machines	Business English
Business Math	Economics

SPECIAL ENTRY REQUIREMENTS:

Applicants will be subject to a thorough investigation of character and habits. Aptitude tests are seldom given by the bank but most generally performed by a State Employment Agency.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Employment in banks is expected to rise through the 1980s.
New jobs resulting from employment growth as well as jobs that must be filled as employees retire or stop for other reasons will account for many openings each year.
Most of these openings will be in clerical occupations.

ADVANCEMENT

When a bank clerk has sufficient experience, they may be promoted.
Advancement opportunity is limited unless employees prepare themselves for better jobs by enrolling in courses offered by the American Institute of Banking or other schools.
Many bank employees start their career in this area and, dependent upon ability, are promoted into much more responsible positions.

MORE ABOUT THE JOB:

The bank clerk in smaller banks may perform several different kinds of work. He/she may sort checks, total debit and credit slips and prepare monthly statements for mailing to depositors. In a large bank, however, each clerk is usually assigned one kind of work and often has a special job title.

In large banks, bank clerks are known as:

-Sorters who separate bank documents - checks, deposit slips and other items;
-Proof Machine Operators who use equipment that in one operation sorts, adds and records the amount of money involved;
-Account Clerks who keep special types of financial records;
-Country Collection Clerks who sort the mail which comes in daily and determine items which are to be held in the main office and which go to branch banks;
-Exchange Clerks who service foreign deposit accounts;
-Interest Clerks who maintain records relating to interest bearing items;
-Mortgage Clerks who type legal papers affecting title to real estate;
-Control Clerks who keep track of the huge volume of documents flowing out of and into computers.

JOB CLUSTER #2

"Business and Office"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40*	$130-180/wk	$160/wk	R130/wk

*Some part-time work is available.

Salaries may vary throughout the state. You may wish to check a local source for salaries in your area.

HOURS OF WORK

Normally forty hours a week. You may be employed on evening or night shifts. Overtime may be necessary for some clerks during the end of the month, or at peak periods.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

hospitalization	group life insurance	free checking account
paid holidays and vacations	retirement income	reduced interest rates on personal loans

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Contact the personnel officer in your local bank.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Bank Personnel Division
1120 Connecticut Avenue N.W.
Washington, D.C. 20036

National Bankers Association
4310 Georgia Avenue N.W.
Washington, D.C. 20036

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Accounting clerk	216.482-010
Balance clerk	216.382-018
Collection clerk	216.362-014

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: BARBER

BARBERS cut, trim and style hair. They may give scalp and hair treatment, facial massages and shaves. Barbers may give shampoos and fit wigs or hair pieces. They may dye hair or style and trim facial hair. Barbers must stay aware of the latest styles and techniques of their profession.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Sociable or friendly nature	Motor coordination	Complete use of hands & fingers
Courteous	Pleasant	Normal eyesight and hearing
Desire to perform a service	Converse about a variety of subjects	Normal health
Like people		Good eye-hand coordination
Patient		Able to stand for long periods
Adapt to daily routine		
Understand and follow directions		

YOU SHOULD KNOW THAT

-you may be required to join a union.
-you may not work as a licensed barber if you are carrying any communicable disease.
-in most states, to obtain a license as an apprentice, barber candidates must be graduates of state approved barber schools.
-must work under a licensed barber for one year before taking State Boards.

YOU MUST BE ABLE TO

-work while standing for a full workday;
-put your customers at ease before you work on them;
-work without direct supervision and perform high quality work on your customers;
-talk about a wide variety of subjects with customers who wish to talk while service is being performed.
-maintain a pleasant manner with customers regardless of your own state of mind.

DOT 330.371-010

PREPARATION AND TRAINING:

High school graduation plus additional training is strongly recommended for barbers.

You must attend an accredited college of barbering (1500 hours).

Courses include:

- lectures
- demonstrations
- class work in haircuts
- jobs and procedures and laws and regulations affecting barbering
- shaves
- shampoos
- facial and scalp treatments

See your counselor for information on barber schools.

SPECIAL ENTRY REQUIREMENTS:

You must pass a state test which includes a written and oral exam plus cutting a model's hair in order to become a registered barber.

PROSPECTS AND OPPORTUNITIES:

JOB AVAILABILITY TRENDS

The demand is fairly steady and finding a job should not be too difficult. Barbers who exhibit better than average skills and abilities in bringing customers back again and again are more in demand.

ADVANCEMENT

Ownership of your own shop is the usual form of promotion.

MORE ABOUT THE JOB:

A barber must be familiar with the latest hair styles and haircutting techniques.

In many large communities, an increasing number of barbers specialize in hair styling.

They charge a premium price since hair styling requires greater skill and more time than regular haircutting.

Barbers must keep their own work station clean at all times and sterilize their own equipment.

The primary duties of the barber are:

cut, trim, style, or taper hair.
give scalp and hair treatments.
shave customer or give facial massage.
shampoo hair and color if requested.
sell various tonics, shampoos, lotions and hair pieces.
fit customer with proper hair piece of desired.
apply hair dressing.
keep working area clean.
use such tools as comb, clippers, scissors and razors.

JOB CLUSTER #13
"Personel Services"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40-60			

Salaries vary widely from shop to shop. The barber usually receives 70% to 75% of the income from services he/she does in the shop plus tips.

Because of varying rates of pay throughout Montana, sepcific information on salaries may be obtained at your nearby employment office.

HOURS OF WORK

The basic workweek is forty hours. Most shops are open Tuesday through Saturday. Barbers remain in their shops until all customers in the shop are taken care of, which often involves working more than eight hours a day.

FRINGE BENEFITS

Depending on l ngth and place of employment, you may receive:

paid vacation
paid holidays

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Talk to your local barber for more details.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

National Association of Barber School, Inc.
338 Washington Ave.
Huntington, W.V. 25701

Associated Master Barbers and Beauticians of America
Box 17783
Charlotte, N.C. 28211

Journeymen Barbers, Hairdressers, Cosmetologists, & Proprietors
International Union of America
4755 Kingsway Drive #320
Indianspolis, Indiana 46205

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.
Electrologist	339.371-010
Scalp treatment operator	339.371-014
Make-up Artist	333.071-010
Cosmetologist	332.271-010

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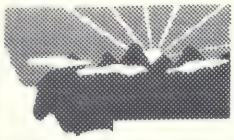

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: BARTENDER

BARTENDERS prepare all kinds of alcoholic and non-alcoholic drinks for customers in restaurants, hotels, bars and other establishments which serve food and drink.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Neatness	Work rapidly when necessary	Generally good health
Courteous	Deal with customers who may be loud and unruly	Normal vision & hearing
Prefer working with people	Handle money accurately	Full use of arms, hands and fingers
Honest	Operate a cash register	Normal eye-hand coordination
Prefer routine work	Converse with people	Normal use of legs & feet
Tactful		

YOU SHOULD KNOW THAT

-you will be on your feet for long periods of time;
-you must be free of communicable diseases;
-you may have to do some clerical inventory and other work as a bartender.

YOU MUST BE ABLE TO

-occasionally deal with customers who may be loud or boisterous.

D.O.T. 312.474.010

PREPARATION AND TRAINING:

A high school graduate is preferred.
There will be on-the-job training available. It will include learning the ingredients, mixing of many drinks and cash register operation.

RECOMMENDED HIGH SCHOOL COURSES: Arithmetic
Social Science
English

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

The number of bartenders is large and expected to increase in future years because of the rising income, allowing more people to eat and drink in commercial establishments and to travel more often.
There is always a need for a good bartender.

ADVANCEMENT

Advancement opportunities for bartenders are poor.
Advancement for most bartenders comes in the form of getting jobs in exclusive locations where wages and tips may be better.
Some bartenders, if they have the capital, may go into business for themselves.

MORE ABOUT THE JOB:

Some of the specific duties the bartender performs are:

-mixing drinks with hard liquor;
-mixing soft drinks;
-operating blender, ice crushers and other mixing machines;
-taking money from customers and making change;
-keeping supplies in stock at the bar;
-pouring draft beer from keg;
-keeping the bar area clean.

In some bars, usually the more exclusive types, the bartender will work mainly with waiters or waitresses who take orders directly from customers and relay them to the bartender.

In many establishments, the bartender learns the names of many regular customers and provides conversation to customers on a wide variety of subjects.

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40-48	$4.00-5.35/hr	$4.40-4.75/hr	$4.00/hr

Salaries will vary depending upon union or non-union shops. Check a local source for current information in your area.

HOURS OF WORK

Forty to forty-eight hours per week, five to six days per week. You may work split shifts and some nights.

FRINGE BENEFITS

Depending on length and place of employment, you may receive

paid vacations and holidays
medical insurance
life insurance
retirement plan

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office.

Talk to a local bartender for further information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information.

Education Director
National Restaurant Association
1530 North Lake Shore Drive
Chicago, Illinois 60610

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Waiter, waitress, formal (hotel and restaurant)	311.477-026
Bar attendant	312.477-010
Waiter, waitress, head	311.137-022

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: BELLHOPS

BELLHOPS carry the baggage of incoming and outgoing hotel guests to their rooms and cars. They perform various other personal services for hotel guests.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Neatness	Manual dexterity	Normal health
Courteous personality		Normal amount of physical stamina
Tact and patience		Full use of arms, legs and hands
Friendliness		Normal hearing and vision (natural or corrected)
A pleasant appearance		
Honest and trustworthy		

YOU SHOULD KNOW THAT

-because most of your earnings result from tips, your treatment of the guests you serve will affect the amount of money you earn;
-you must be able to handle customers who may have many kinds of complaints.

YOU MUST BE ABLE TO

-stand for long periods of time;
-bend, stoop, life and walk up and down stairs while carrying heavy loads;
-talk on a wide variety of subjects, especially regarding your community, with guests who desire conversation;
-maintain a courteous and tactful disposition toward all guests of the hotel or motel regardless of your own personal feelings.

D.O.T. 324.677-010

PREPARATION AND TRAINING:

There is no set educational level required for bellhops. Those who wish to be bellhops should have a minimum of a high school education since this is a job for which there is usually considerable competition, and those without a diploma are at a severe disadvantage in applying for jobs. You will receive training while on the job.

For those interested in getting ahead in the hotel business, the job as a bellhop can be a good beginning, especially if additional education in accounting and other business fields is obtained. Many bellhops attend school during parts of the day while working at night. Work and character references are important as preparation and are used in hiring.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities are available, but even with expansion, openings are not frequent for permanent bellhops.
Opportunities are best at resort hotels and motels during their seasons. For example, beach hotels in the summer and mountain hotels in the winter.

ADVANCEMENT

Opportunities are limited for most bellhops.
Above average workers may be promoted to bell captain and service superintendent.
Bellhops who attend college are more likely to have opportunities to move into the business departments of hotels in such areas as auditing, accounting and management.

MORE ABOUT THE JOB:

In all hotels, large or small, the bellhop performs certain standard tasks:

-carries the incoming guests' baggage to the room assigned;
-checks to see that the lights are working;
-checks the supply of soap and towels;
-makes sure the room or rooms are clean and in order;
-may suggest the use of various hotel services, such as the dining room;
-performs personal services for guests, such as running errands;
-in large hotels, a special baggage porter may be assigned to carry outgoing baggage, while in smaller hotels, the bellhop is more likely to do this;
-in smaller hotels, the bellhop may also double as elevator operator and do other jobs at times;
-in all hotels, it is good for the bellhop to have a knowledge of local attractions and points of interest which may be of interest to guests;
-the bellhop, in all situations, must be courteous and helpful.

JOB CLUSTER #13

"Personal Services"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$3.50/hr plus tips		

The figures above are based on union minimums.

HOURS OF WORK

The forty-hour week is standard, though this varies with the season. Hours may be at night and on weekends, though the majority of workers are employed during the day.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

paid vacations and holidays
extra pay for night shift
health and welfare plans
retirement plans

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LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Check at your local hotel for further information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

American Hotel and Motel Association
221 West 57th Street
New York, New York 10019

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Baggage Porter	324.477-010
Steward/Stewardess (water trans.)	350.137-018
Porter, (r.r. trans.)	357.677-010
Bell captain	324.137-014
Room service clerk	324.577.010

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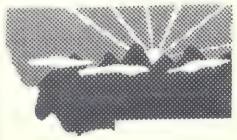

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: BILL COLLECTOR

BILL COLLECTORS locate customers who have failed to make payments on goods or services they purchase.

They may take payment, repossess goods or work out repayment contracts with the customer.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Ability to work with people	Perceptiveness	Good general health
Neat appearance	Good judge of people	Normal or corrected eye-sight & hearing
Tact and courtesy	Verbal facility, written and oral	
Honesty	Numerical	
Persuasiveness		
Persistence		
Aggressiveness		

YOU SHOULD KNOW THAT

-you will have to become familiar with the town and its streets;
-you will be required to have a driver's license;
-a good deal of the work will be routine and organized;
-much of your time will be spent "in the field" collecting accounts;
-you should be aware of consumer protection ideas and laws, especially recent regulatory legislation.

YOU MUST BE ABLE TO

-deal firmly, yet fairly, with people;
-work in situations which are not always pleasant;
-show good judgment and common sense;
-speak well and communicate ideas quickly and clearly.

D.O.T 241.367-010

PREPARATION AND TRAINING:

High school graduation is preferred by all employers and required by most of them. Most employers give the job to applicants who have at least two years college training in business or related fields.

Most employers provide on-the-job training.

Most employers expect you to have a car and a valid driver's license; however, many employers furnish a car.

RECOMMENDED HIGH SCHOOL SUBJECTS:
- English
- Speech
- Business Math
- Typing
- Bookkeeping

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Credit buying has increased rapidly during the past twenty years. Because buying on time has come so easy, there are many families which find themselves unable to pay all bills. This is where the bill collector comes in. Indications are that this trend will continue. This means there will be plenty of jobs for qualified employees.

Bill collectors are employed in cities of all sizes. Employment chances are best in larger metropolitan areas.

ADVANCEMENT

Bill collectors may work into supervisory or management positions. Many credit department managers, loan officers and bank or finance company branch managers started as bill collectors.

MORE ABOUT THE JOB:

Bill collectors locate customers who have failed to pay bills, loan payments or other debts, and make arrangements for payment or repossession of the original purchase.

They may:

-use telephone, mail or personal contact;
-trace addresses of customer who has moved and left no forwarding address;
-contact customer and find out why bills were not paid;
-depending on circumstances - and customer's attitude - collect payment, repossess goods, or make arrangements for catching up on overdue bills;
-keep records of overdue accounts and of payments received;
-work with police agencies, particularly when repossession is necessary.

JOB CLUSTER #2

"Business and Office"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$135-250/wk	$160-200/wk	$-35/wk

Salaries may vary throughout the state. Check a local source for current information in your area.

HOURS OF WORK

The forty-hour workweek is standard. However, because of the nature of the business, employees must often work early in the morning or late in the evening or on weekends to contact delinquent accounts. Usually regular work time is taken off to compensate for any night or weekend work.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

retirement programs
health insurance
paid vacation and and holidays
mileage and expense allowance
paid overtime

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LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office.

The local credit bureau may be able to provide you with further information on bill collectors.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

National Consumer Finance Association
Education Services Division
1000 16th Street, N.W.
Washington, D. C. 20006

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Repossessor (clerical)	241.367-018
Skip tracer	241.367-026
Collection clerk	241.357-010

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MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: BILLING TYPIST

The BILLING TYPIST prepares bills to customers for products purchased. The typist prices products from previously calculated lists and may adjust prices to reflect discounts. Typical activities include computing wages, interests, production costs and verifying computations recorded in accounts.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Dependable	Clerical	Good eye-hand coordination
Neat appearance	Numerical	General good health
Honest	Good finger dexterity	Normal vision and hearing (natural or corrected)
Accurate		
Tactful		
Efficient		
Thorough		

YOU SHOULD KNOW THAT

-you must be able to work in an organized and routine situation;
-accuracy in work habits is an absolute must;
-high school graduation is generally required;
-you should have an expressed preference for clerical work.

YOU MUST BE ABLE TO

-work well with others;
-work with numbers with attention to detail to avoid errors;
-"catch on" quickly and have the ability to reason and make sound judgments;
-learn to use machines such as calculating, adding, posting and billing machines, and typewriters;
-sit for long periods.

D.O.T. 214.382-014

PREPARATION AND TRAINING:

High school graduation is usually required with emphasis on basic clerical and mathematical training. Many places of employment prefer some college training or business college courses.

Training is usually offered on the job. It can take from a few weeks to a year, depending on the duties and the place of employment.

The more training and preparation you have, the more easily you will obtain a job and advance to higher paying jobs.

Even after employment, night classes are available in most places to help you advance in your job.

RECOMMENDED HIGH SCHOOL SUBJECTS:	Business Problems	Speech
Business Math	Business Machines	Business English
Algebra	Bookkeeping	Clerical Practice
COURSES AFTER HIGH SCHOOL:	Bookkeeping	Business English
Business Math	Consumer Problems	Business Correspondence
Algebra	Typing	Machine Calculations
Accounting	Office Training and Procedures	Machine Transcription
Advanced Cost Accounting		Duplicating

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Employment is expected to increase mainly because of continuing expansion in business activities.
Specialized training in machine operation will have to be obtained to keep pace with the advanced machine technology in the business world.
Billing typists work for all sizes and types of commercial and business firms.
Large metropolitan areas hold the best opportunities for employment.

ADVANCEMENT

The billing typist may advance to: billing machine operator
payroll clerk
bookkeeper

MORE ABOUT THE JOB:

Billing typists:

-prepare invoices and bills of lading (cargo or shipments) by computation of amounts due from records such as purchase orders, sales tickets and charge slips;
-use adding and calculating machines, typewriters and posting machines;
-type invoices listing items sold, amounts due, credit terms and date of shipment;
-type credit forms for customers or finance companies;
-work indoors in a generally well-lighted, heated, air-conditioned room with little or no physical demands made on the worker;
-prepare weekly, bi-monthly or monthly payrolls for employees;
-keep records of all accounts payable, received, shipments both received and sent and incorrect merchandise;
-do general clerical duties such as correspondence, telephoning, typing various materials, bookkeeping and filing;
-keep records of all bad accounts;
-telephone and bill delinquent customers;
-may also be called Bill of Lading Clerk, Invoice Clerk, Order Biller, or Toll Billing Clerk;
-must spend long hours sitting.

JOB CLUSTER #3

"Business and Office"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$150-210/wk	$185/wk	$150/wk

Salaries paid billing typists may vary according to experience, length of time on the job and the difficulty of the particular tasks performed for any one day.

HOURS OF WORK

The forty-hour week is standard for most clerical-type jobs. Saturday work is required by some places of employment. Hours usually run from 8:00 or 9:00 a.m. to 5:00 p.m. with weekends off. Billing typists who also post employees' salary checks are sometimes required to work overtime before paydays.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

medical plan	paid holidays	life insurance
paid vacation	overtime	retirement programs
sick leave	health insurance	

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Supervisor of Office Occupations
Office of Public Instruction
State Capitol
Helena, Montana 59601

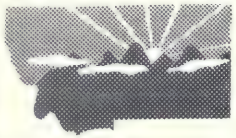
ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

United Business Schools Association
1101 17th Street, N.W.
Washington, D.C. 20036

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Account analyst (banking)	214.382-010
Insurance clerk	219.367-014
Paymaster (clerical)	211.367-010
Rate Clerk, Freight (motor trans.)	214.362-030



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: BIOLOGIST

The BIOLOGIST studies the origin, development, anatomy, function and distribution of life. He/she usually specializes in one particular animal or plant or studies the relationship between plants and animals. He/she works in industry, education or private research.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Mental alertness	Scientific	Good physical health
Good memory	Finger dexterity	Stamina
Attention to detail	Numerical	Normal vision and hearing (natural or corrected)
Pride in work	Some clerical	Eye-hand coordination
Thorough	Verbal	Color perception
Ability to work alone or with others		
Patience		

YOU SHOULD KNOW THAT

- -you will do work in the field and in the laboratory;
- -the minimum requirement is a bachelor's degree in biology;
- -biologists are employed in private industry, government service and educational research and instruction;
- -most biologists specialize in one particular area, animal or plant.

YOU MUST BE ABLE TO

- -learn, absorb and apply large amounts of scientific and technical knowledge;
- -learn to use such instruments and equipment as microscopes and incubators;
- -complete at least four years of college, and for some jobs, up to eight years of advanced training;
- -work both outdoors and in a laboratory;
- -spend much time on your feet.

D.O.T. 041.061-030

PREPARATION AND TRAINING:

The biologist must meet the following educational requirements:

completion of a college prep high school program with good grades and particular emphasis on sciences and mathematics;
completion of a four-year college program in biology with good grades.

In addition, for many jobs, the candidate must have a master's degree in biology from an approved college or university.

Most biologists today are specialists in one area of the broad field. If you decide to specialize, you will probably need additional training and usually must obtain a master's degree from an approved college or university. During this period, you will receive instruction and training in your specialty field.

When you are employed, you will receive additional education and training, usually by working with experienced biologists.

RECOMMENDED HIGH SCHOOL COURSES: A college preparatory course is recommended with emphasis in the sciences.

JOB CLUSTER #1

"Agri-Business and Natural Resources"

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

The need for trained candidates is expected to remain stable or slightly increase in the future.
Most opportunities are in educational institutions; over fifty percent of all biologists work for universities.
There are also openings in governmental work and private industry.
The greatest openings are in California, New York, Maryland, Pennsylvania and Illinois.

ADVANCEMENT

Advancement can take many forms, among them:

increased salary
consultant work
contributing to professional magazines
supervision of biological research projects
lecturing at universities, governmental meetings

MORE ABOUT THE JOB:

The biologist:

-studies the origin, development, anatomy, function and distribution of plants and animals;
-may specialize in research on a particular plant or animal, or on the relationship between plant and animal life;
-may be employed in industry, usually by a chemical or medical firm;
-may be employed in education as a college or university instructor and researcher;
-may be employed in governmental service, usually by a health or resources organization, to check bacteria, plant and animal life in lakes, streams and rivers;
-may work in a laboratory, in the field, or in both capacities;
-observes plant and animal life;
-collects specimens and samples;
-runs various tests, dissects, grows bacteria cultures and observes specimens in lab;
-uses scientific equipment such as microscopes, scales and incubators in carrying out tests;
-accumulates findings and prepares them for articles, charts, lectures and other forms of presentation.

Types of biologists:

botanists	microbiologists	zoologists
agronomists	anatomists	biophysicists
embryologist	entomologists	geneticists
horticulturalists	pathologists	pharmacologists
physiologists		

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$10,900-27,000	$11,000-20,000	$10,900

Salaries tend to be much higher in private industry than in education or government service.

HOURS OF WORK

The hours of work vary widely depending on the type of employer, the duties performed and weather conditions. The researching biologist often spends long hours in the field or laboratory and weekend and overtime work is quite common.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

retirement plan	sick leave	health plan
furnished car	expense account	life insurance
paid holidays and vacations		

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LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

American Institute of Biological Sciences
3900 Wisconsin Avenue, N.W.
Washington, D. C. 20016

American Society of Horticultural Science
914 Main Street
P. O. Box 109
Saint Joseph, Michigan 49085

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Biochemist	041.061-026
Pharmacologist	041.061-074
Plant pathologist	041.061-086
Microbiologist	041.061-058

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: BOILERMAKER

BOILERMAKERS are skilled workers who specialize in the repair, fabricating, assembling, and disassembling boilers, tanks, vats, pressure vessels, heat exchangers, and a similar structure made of metal plate.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Ability to make own judgments	Ability to perform mathematical operations	Good physical strength and endurance
Accurate, precise work habits	Ability to understand important details of objects, either from sketches or blueprints	Normal vision and hearing (natural or corrected)
Interest in mechanics		Good sense of balance
Ability to work with others		Normal use of legs and feet
Initiative		Average finger and manual dexterity
Alertness		
Ability to take orders		

YOU SHOULD KNOW THAT

-the boilermaker is often required to do some lifting, crawl in cramped spaces, and climb to high places.
-the boilermaker does much stooping, reaching, and handling.
-when working inside boilers and other structures, he/she may work under extreme heat and cold, high humidity, poor ventilation, and the noise of hammering of steel plates.
-boilermakers work both out-of-doors and indoors.

YOU MUST BE ABLE TO

-work with your hands.
-work in small enclosed spaces or on scaffolds and platforms high in the air.
-work in noisy surroundings.
-stand heat and cold.

DOT 805.261-014

PREPARATION AND TRAINING:

Journeyman boilermakers can learn their trade in several ways:

as a helper;
as an informal apprentice or learner; or
as a formal apprentice.

Of the three ways, the formal apprenticeship is considered the best method of receiving well-rounded experience, related training, and fair wages with periodic increases.

RECOMMENDED HIGH SCHOOL COURSES:

Sheet metal shop
Welding
Mechanical drawing
Shop mathematics

and any other courses in which you can learn about the properties and qualities of metal.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Boilermakers are employed in every state. They are found in private and government shipyards and in a maintenance and repair shop of chemical, steel, petroleum, and gas companies.

ADVANCEMENT

Advancement in this occupation is limited. You may be able to advance to foreman or superintendent.

MORE ABOUT THE JOB:

Boilermakers:

assemble, install, repair, and service boilers, smokestacks, vats, tanks, and other structures made of form steel plate;
in repair work, he/she determines the cause of trouble, takes the boiler apart, or removes the defective section and welds the replacement part or section;
using blueprints, the boilermaker also assembles any wrecks, new boilers, and other vessels either at the sites of their use or in manufacturing plants;
constructs or supervises the construction of foundations and scaffolds to support steel plate structures;
assembles and temporarily connects steel plate sections in place by welding and bolting; rivets or welds the joints permanently;
the boilermaker also inspects and corrects defects.

JOB CLUSTER #4
"Construction"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$6.00-9.62/hour	$7.50/hr	$6.00/hr

Salaries may vary throughout the state. Unions control much of the wages in this occupation. Check your local union or employment service for information in your area.

HOURS OF WORK

Forty hours per week is normal.

FRINGE BENEFITS

Depending on length and place of employment you may receive:

medical insurance
paid vacations and holidays
retirement pensions
life insurance
sickness and accident insurance

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LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

International Brotherhood of Boilermakers, Ironship Builders, Blacksmiths, Forgers, and Helpers
Eighth at Sixth Avenue
Kansas City, Kansas

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Boilermaker helper	805.664-010
Boilermaker fitter	805.361-014
Sheet metal worker	804.281-010

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MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: BOOKKEEPER

The BOOKKEEPER maintains the financial records of a business and enables the owner to keep informed of its financial position. All businesses, large and small, require bookkeeping workers. In some larger businesses, much of the bookkeeping may be done by computer.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Concern for detail	Clerical	General good health
Integrity	Numerical	Normal use of hands
Honesty	Be able to memorize	Eye-hand coordination
Dependability	Finger dexterity	Good vision (normal or corrected)
Initiative		
Cooperativeness		

YOU SHOULD KNOW THAT

-offices are usually quiet and attractive.
-overtime work provides extra salary during rush periods.
-a bookkeeper's work is usually very routine.

YOU MUST BE ABLE TO

-sit most of the working day;
-work under conditions of frequent interruption;
-do detailed work quickly and accurately;
-adapt to routine duties involving little change;
-understand systematic, numerical, and record gathering procedures.

DOT 210.382-014

PREPARATION AND TRAINING:

High school graduation is the minimum education required. Employers will usually give preference to applicants with some college training.

RECOMMENDED HIGH SCHOOL SUBJECTS:

Business Math	Secretarial Practices
Clerical Practices	Business Machines
Business Problems	Bookkeeping
	Typing

If you are thinking about advancement, such subjects as English, Reading, Speech and Social Studies will give you some desirable background.

A bookkeeper must have the ability to operate calculators, bookkeeping machines, adding machines and typewriters. People having junior college or business college training are preferred. On-the-job training may be available.

Note:

If you are thinking about entering a specific area of business, for example: as a hospital bookkeeper, it would be of great help to pick up some courses in medical terminology where you will learn many of the specialized medical terms you will later find in records.

PROSPECTS AND OPPORTUNITIES:

JOB AVAILABILITY TRENDS:

Chances for employment are excellent. Job opportunity will moderately increase throughout the mid 1980's. Despite the trend toward automation, bookkeeping opportunities are remaining stable or are increasing.

ADVANCEMENT:

Chances for advancement are also excellent. Bookkeepers showing ability may be promoted to more difficult or responsible jobs, such as supervising or managing. Interested individuals can take college courses aimed at a degree in accounting and may advance to an even more rewarding field.

MORE ABOUT THE JOB:

The Bookkeeper generally has the following duties:

prepares withholding, social security, and other tax reports;
operates calculating and bookkeeping machines;
verifies and enters in journals the details of transactions;
balances books and compiles reports showing statistics;
computes, types and mails monthly statements to customers;
summarizes details in separate ledgers;
completes books, to or through trial balances;
calculates employee wages from plant records and/or time cards and makes out paychecks.

JOB CLUSTER #2
"Business and Office"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
37½-44	$13,443/year		$10,920/year

Salaries may vary considerably in this field depending on the size of the firm the difficulty of the duties, and the amount of responsibility you may be assigned.

HOURS OF WORK

The bookkeeper usually works a forty-hour week, although the work week may vary from thirty-five to forty-eight hours. Overtime sometimes occurs during the tax season, but night work is not too common.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

paid vacation
paid sick leave
overtime
retirement plan
profit sharing

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LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Investigate local businesses that employ bookkeepers.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

United Business Schools Association
1730 M. Street N.W.
Washington, D.C. 20036

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Audit clerk	210.382-010
Bookkeeping machine operator	210.382-022
Credit card clerk	210.382-038

D.O.T. Fourth Edition, page 280

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: BOOKKEEPING-MACHINE OPERATOR

A BOOKKEEPING-MACHINE OPERATOR may be employed by an insurance company, or a bookkeeping company, a similar business or a governmental agency. The operator uses an electric bookkeeping machine to post daily business transactions in special ledgers and journals.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Ability to concentrate	Clerical	Good eye-hand coordination
Neatness in work	Numerical	Good eyesight (nat. or corrected)
Dependability		Normal finger dexterity
Ability to work alone		
Attention to detail		

YOU SHOULD KNOW THAT

- -while the work is not physically hard, it tends to be highly repetitive and can become monotonous;
- -the increased use of electronic data processing machines will likely reduce the need for large numbers of bookkeeping machine operators;
- -ability to type is essential in many establishments;
- -if employed in a small company, you will be required to perform other general clerical office duties.

YOU MUST BE ABLE TO

- -endure long hours of sitting;
- -tolerate machine noises about you;
- -achieve extreme accuracy in work while maintaining a high speed;
- -understand and use basic arithmetic;
- -understand the operation of your machine.

D.O.T 210.382-022

PREPARATION AND TRAINING:

Employers almost always require that bookkeeping-machine operators be high school graduates.

RECOMMENDED HIGH SCHOOL SUBJECTS: Bookkeeping, Typing, English, Office Machines, Office Practice

COURSE OF STUDY AFTER HIGH SCHOOL

Excellent training programs are available through adult education programs, private business schools and Vocational Technical Centers.

ADDITIONAL FACTS ABOUT TRAINING

Most employers require six months to one year experience of financial record keeping or operating a bookkeeping machine or a certificate of completion or graduation from an accredited bookkeeping or office machine training program.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Jobs are available mainly in the large companies and cities. There may possibly be a decline of bookkeeping-machine operators because of the fast, electronic computerized machines, but jobs are still quite abundant because of increased activity in business.

ADVANCEMENT

Promotion is from simple machines to more complicated machines. Employees may advance to new equipment which requires more training. Some companies promote bookkeeping-machine operators to the position of bookkeepers. In banks, they may be promoted to the position of teller.

MORE ABOUT THE JOB:

The bookkeeping-machine operator records complete sets of records of financial transactions of an establishment while using a bookkeeping-machine. The bookkeeping-machine operator uses the bookkeeping-machine in order to:

record debit and credit transactions between customer and the company;
prepare customer invoices, ledger sheets and other such records in one operation;
verify entries and summaries and balance totals to insure accuracy;
the operator may also operate other office machines such as adding and calculating machines and may be known according to nature of operations performed such as:

accounts payable	posting machine operator
accounts receivable	recording clerk

Specific operations involve:

sorting documents to be posted, either alphabetic or numeric;
manipulating keys on machine to type data and make automatic calculations;
selecting and placing bookkeeping form on writing surface of machines and setting the carriage.

JOB CLUSTER #2

"Business and Office"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
37½-40	$650-840/mo	$690/mo	$650/mo

Because of varying rates of pay throughout Montana, specific information on salaries may be obtained at your nearby employment office.

HOURS OF WORK

Bookkeeping machine operators usually work from 8:00 a.m. to 5:00 p.m. Monday through Friday. In banks, they may be required to work until 6:00 p.m. on Fridays. Overtime is necessary during peak periods but is nominal.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

paid vacations	life insurance	health insurance
profit sharing plans	retirement plans	sick leave

VV10579

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Your local bank or any retail business or store may have information on a bookkeeping-machine operator.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

United Business Association
1730 M Street N.W.
Washington, D. C. 20036

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Audit Machine Operator	216.482-018
Calculating Machine Operator	216.482-022
Policy Value Calculator (Ins.)	216.382-050
Proof Machine Operator	652.382-010
Aircraft Log Clerk	221.362-010

D.O.T. Fourth Edition, page 165

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: BORDER PATROL AGENT

BORDER PATROL AGENTS are officers of the Immigration and Naturalization Service, the agency of the U. S. Department of Justice that is responsible for administering the immigration and nationality laws of the United States.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Loyalty to the Government	Intelligent	Sound physical condition with good muscular development
Honesty	Some clerical	Normal eyesight and hearing (natural or corrected)
Ethical	Able to communicate	Color discrimination
Emotional stability	Spatial	Distinct speech and free breathing
Energetic	Form perception	
	Good memory	

YOU SHOULD KNOW THAT

The work is hazardous when dealing with dangerous criminals and other persons who exhibit violent and unpredictable behavior.
Any serious deviation from a sound physical condition will be grounds for rejection of an applicant for appointment; however, remediable defects or curable disease will not exclude a person from examination, but proof that such defects have been remedied or the disease cured must be given.

YOU MUST BE ABLE TO

-gather and evaluate facts
-work under rigorous environmental conditions
-detect immediately violations of the law
-develop and keep pace with an ever-changing variety of situations confronted in the performance of your duties
-converse with people at varied levels
-deal tactfully and diplomatically with people for good public relations

D.O.T. 375.363-010

PREPARATION AND TRAINING:

All competitors for the position of Border Patrol Agent are required to take a written examination designed to measure verbal abilities and judgment. Competitors who qualify in the written test are required to appear for an oral interview designed to determine if applicants possess the personal qualities necessary for successful performance of the duties of the position. Persons selected for appointment report to the Border Patrol Academy at Port Isabell, Texas, for approximately three months of intensive training. While in attendance at the training school, appointees are required to devote full time to their studies. They are taught the history and responsibilities of the Service and instructed in immigration and nationality laws, Spanish, physical training, marksmanship, and other courses pertinent to the work of the patrol. During the balance of the probationary year, their intensive training program is continued under the direction of a sector training officer and in the company of a senior officer. The new employees are given further written and oral examinations at the conclusion of 5½ and 10 months service. Those candidates who do not succeed during the course of the probationary period are separated.

Helpful high school courses include:

Spanish	psychology	math	government
English	physical education	speech	sociology

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

The Immigration and Naturalization Service offers splendid opportunities to intelligent and energetic young people interested in immigration law enforcement who want to prepare themselves for positions of greater responsibilities through on-the-job and service-offered training.
All appointments will be to the Mexican border. Appointees must expect to spend at least two years on the Mexican border before they will be considered for transfer to the Canadian border. Montana Border Patrol Stations are located at Plentywood, Wolf Point, Malta, Havre, Shelby, Sweetgrass, Browning and Whitefish.

ADVANCEMENT

As they gain additional experience, officers become qualified for promotion in the Border Patrol and to other positions in other activities of the service.
The Immigration and Naturalization Service is a career service in which advancement is based upon merit. Vacancies from the "journeyman" level up to executive levels are filled by the promotion of officers who have demonstrated their capacity for advancement.

MORE ABOUT THE JOB:

The Border Patrol Agent-

-detects and/or prevents smuggling and unlawful entry of aliens into the U.S.
-arrests, detains, or arranges for deportation of persons according to laws, regulations, and departmental orders
-writes reports of activities and decisions
-may patrol border on foot or horseback, or by airplane, automobile, or boat to detect and apprehend persons entering the United States illegally.

Border Patrol Agent applicants must:

-possess a valid drivers license and have at least one year of licensed driving experience
-be citizens of or owe permanent allegiance to the United States
-have reached or passed their 21st birthday on the date of appointment

JOB CLUSTER #14

"Public Service"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$12,000 and up*		

*Salaries are paid according to the Federal Government Salary Schedule. Officers who complete their probationary year successfully build a firm foundation for advancement within the service. In recognition of this; they are promoted to the journeyman position of Border Patrol Agent. Those who display ability for independent action, mature judgment and willingness to accept great responsibility may be promoted to a higher level journeyman position. You may wish to check the U.S. Civil Service Commission for GS rating.

HOURS OF WORK

Border Patrol Agents work the standard Federal workweek of 40 hours. Additional compensation is provided for authorized overtime work.

FRINGE BENEFITS

Border Patrol Agents enjoy many fringe benefits, among them may be the following:

-annual vacation leave
-sick leave with pay
-retirement benefits
-low-cost life and health insurance for which the Government shares in the cost.

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Contact your local Civil Service Office.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

U. S. Civil Service Commission
Washington Area Office
1900 E. Street NW
Washington, D.C. 20415

RELATED OCCUPATIONS:

JOB TITLE:	D.O.T.#:
Building Inspector (gov. ser.)	168.267-010
Coroner (gov. ser.)	168.161-010
Health Officer, Field (gov. serv.)	168.167-018
Postal Inspector (gov. ser.)	168.267-062

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB:

BRAKE AND FRONT END MECHANIC

The BRAKE AND FRONT END MECHANIC works for new car dealers, automotive repair shops, tire stores, automotive departments of large stores and independent brake and front end specialists. He/she is a mechanic who specializes in repairs and adjustments to the brake, steering and suspension systems of both new and used cars and trucks.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Interest in mechanics	Mechanical	Good general health
Pride in work	Numerical	Ability to lift up to 75 lbs.
Dependable	Some clerical	Good eye-hand coordination
Capacity to pay attention to details	Finger dexterity	Average vision and hearing (natural or corrected)
Good memory		
Thorough		

YOU SHOULD KNOW THAT

-you may be required to join a union;
-with some employers, you may be asked to drive a tow truck;
-you will be expected to have a valid Montana Driver's License.

YOU MUST BE ABLE TO

-learn to perform a wide variety of mechanical tasks;
-work with precision wheel alignment and brake service equipment;
-use power winches, hoists and brake service equipment;
-take written and oral orders from a supervisor;
-do basic math and compute front end adjustments from manufacturer's manual and charts.

DOT 620.281-026

PREPARATION AND TRAINING:

While there is no formal minimum, most employers prefer high school graduates.

RECOMMENDED HIGH SCHOOL SUBJECTS:
Auto Mechanics
Metal Shop
Welding
Machine Shop
Bookkeeping
English
Shop Math

COURSE OF STUDY AFTER HIGH SCHOOL:

The Billings Vocational Technical Center, Butte Vocational Technical Center, Helena Vocational Technical Center, Miles Community College and Northern Montana College offer courses in automotive mechanics upon completion of which may mean a better chance of getting a job.

COURSES TO TAKE:
Automotive Mechanics
Auto Body
Welding
Small Business Management
Basic Bookkeeping
Automotive Electronics
Machine Tools
Suspension Systems
Merchandising
Sales Psychology

ADDITIONAL FACTS ABOUT TRAINING

Most employers offer some kind of on-the-job training. Some of the major manufacturers offer schools and clinics on brake and front end work which you may be sent to by your employer free of charge. You may be required to provide some of your own tools.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Jobs are found in communities of all sizes, but opportunities are best in larger communities. The number of such employees is expected to increase moderately throughout the next ten years principally because of the great increase in automotive sales. Job opportunities for the trained specialist are excellent. There is not a great demand for new trainees, but the student with interest and ability should be able to find a training program without a great deal of difficulty. Some dealers start trainees as lube persons or new car "get ready" people.

ADVANCEMENT

The brake and front end specialist can advance from apprenticeship to journeyman. A journeyman brake and front end person can become assistant service manager, service manager, supervisor or sales representative for a manufacturing firm.

MORE ABOUT THE JOB:

Brake and front end mechanics are experts in the field of auto mechanics. They work almost exclusively with wheel balancing and alignment, suspension systems, shock absorbers, steering linkage and brake installation and repair; although in some smaller shops, they may do some minor tune-up work when things are slow.

They must be familiar with:

- standard hydraulic braking systems
- power brake systems
- disc brake systems
- wheel alignment procedures
- wheel balancing
- suspension systems
- shock absorbers
- steering systems
- control arms
- stabilizers
- brake shoes
- master cylinders
- wheel cylinders
- vacuum pumps
- helper springs
- tie rods
- brake drums
- brake pads
- brake fluids
- ball joints
- aid shocks

Because much of the work is of a technical nature and because there are so many different makes and models of cars, he/she must be able to read and understand technical manuals.

JOB CLUSTER #15

"Transportation"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	Journeyman Worker $10.06/hr		

Salaries may vary throughout the state. Check with your local union or another source for salary information in your area.

HOURS OF WORK

The standard workweek is forty hours, although some brake and front end specialists work six days a week. Normal hours are 8:00 a.m. to 5:00 or 5:30 p.m. Monday through Friday. Working conditions in most dealerships are good. The work involves no great physical hazards.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

paid overtime	paid vacation and holidays	discounts on parts
sick leave	health insurance	retirement plan

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Check the index for further information on the apprenticeship program.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

The Retail Automobile Business
General Motors Corporation
Detroit, Michigan 48200

Independent Garage Owners
of America Incorporated
343 South Dearborn
Chicago, Illinois 60604

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Automobile mechanic	620.261-010
Tune-up mechanic	620.281-066

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: BRICKLAYER

The BRICKLAYER uses masonry materials and mortar to build walls, fireplaces, chimneys, arches, piers, and other structures.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Pride in work	Tolerate heat and dust	Good physical condition
Willingness to do hard physical work	Work off the ground on scaffolding	Good eyesight
Must be capable of following directions	Be able to be on your feet for long periods of time	Good sense of balance
Have good judgment		Stamina
		Good eye-hand coordination

YOU SHOULD KNOW THAT

Bricklaying has its hazards: falls from scaffoldings, falling objects, skin burns, strained backs, and infected fingers from the abrasive action of bricks and tile.
The bricklayers work is somewhat seasonal, falling off during the winter.
Apprentices begin by performing menial tasks, working up to the more complex with experience at the trade.

YOU MUST BE ABLE TO

-serve an apprenticeship to qualify as bricklayer;
-tolerate heat and dust
-work off the ground on scaffolding;
-work in a dusty atmosphere on occasion;
-work outdoors most of the time.

DOT 861.381-018

PREPARATION AND TRAINING:

Most of those who wish to become bricklayers serve an apprenticeship. Most employers prefer the aspirants to the bricklaying trade to have some experience in the construction trades, preferably as a hod carrier so that they will have had the chance to observe the bricklayer in action. The apprenticeship period serves as the training that is required and is done under the guidance of a journeyman on the job.

COURSE OF STUDY:

High school courses which might prove helpful to the future bricklayer include:

mathematics
English
mechanical drawing
blueprint reading
shop

SPECIAL ENTRY REQUIREMENTS:

Acceptance by a union committee as an apprentice bricklayer is necessary as a step on the road to becoming a journeyman bricklayer.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TREND

Opportunities are limited due to the wide use of new building materials.
Competition for existing apprenticeships is stiff.
Bricklayers will still be needed as they diversify and perform new functions in connection with newly developed building materials.
Opportunities are found wherever new construction is occurring.
Bricklayers are employed by masonry and large general contractors.

ADVANCEMENT

Experienced bricklayers advance to foreman, then to superintendent or estimator.
Some bricklayers, those with the capital, go on to become licensed contractors.

MORE ABOUT THE JOB:

The bricklayer begins a job by studying blueprints and measuring and laying out the job. He/she then gathers the needed tools and begins laying horizontal rows of bricks or whatever masonry is being used with mortar brought by a hod carrier. He/she spreads some mortar with a trowel, places a brick in it, and taps the brick into the desired position. The bricklayer scrapes away the excess mortar and finishes the mortar between the masonry with the point of the trowel or a jointer. When a brick must fit into a small place, he/she breaks it with a hammer or marks it for cutting on the power saw.

As the job progresses, the bricklayer tests the vertical and horizontal alignment with a plumb and a level and checks corners or curves with a square or a template. When the job is finished, he/she or an apprentice bricklayer cleans up the work area.

Frequently, the bricklayer erects a veneer of brick or tile against an existing wall rather than building the supporting wall itself. Occasionally he/she installs pre-cast panels which may be made of concrete and artificial stone. He/she ties, welds, dowels, or otherwise secures the units of facing materials to the main part of the structure using wires or other fasteners embedded in mortar. Sometimes several kinds of material are used in the same structure for either decorative or practical reasons. In building a fireplace, for example, the bricklayer uses refractory materials for the firebox and flue liner, installs a metal damper, and builds the remainder of the structure of a third material, such as used brick.

JOB CLUSTER #4
"Construction"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
35-40	$9.80 journeymen wages*		

*For union journeymen. Non-union wages may be lower. Apprentices generally start at 50% to 60% of the journeyman's wage, both union and non-union. Wage scale may vary throughout the state. Check your local union or employment service for current information.

HOURS OF WORK
The normal week varies between thirty-five and forty hours. Overtime is rare. Work is usually performed during daytime hours.

FRINGE BENEFITS
Depending on length and place of employment, your employer may provide fringe benefits including retirement plans and health plans. Paid vacations are not usually provided.

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

See the index for further information on an apprenticeship program.

ADDITIONAL SOURCES OF INFORMATION:

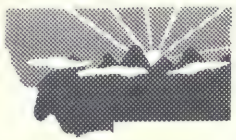
Your school counselor and librarian may also help you find additional information

Bricklayers, Masons, and Plasterers International Union of America
815 15th Street Northwest
Washington, D.C. 20005

Structural Clay Products Institute
1520 18th Street Northwest
Washington, D.C. 20036

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Stonemason	861.381-038
Terrazzo worker	861.381-046
Tile setter	861.381-054



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: BUILDING CONSTRUCTION INSPECTOR

The BUILDING CONSTRUCTION INSPECTOR inspects and oversees construction of bridges, buildings, dams, highways and other types of construction work to insure that procedures and materials comply with plans and specifications. Inspectors may also inspect old buildings and other structures to assure that structures conform to state and municipal safety codes.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits
- Dependable
- Honest
- Self-reliant
- Sound judgment
- Ability to get along with people
- Tact
- Punctual

Aptitudes
- Speak clearly
- Good decision maker
- Like to work outdoors
- Ability to convey ideas to others

Physical Abilities
- Good physical health
- Able to work in all kinds of weather
- Able to climb heights, stoop and walk extensively

YOU SHOULD KNOW THAT

- -usually several years of experience in a construction trade such as a carpenter or an electrician is required before you can qualify as a building inspector;
- -building inspectors spend the greatest part of their time at building sites and traveling from one site to another;
- -job opportunities increase and decline with construction trends in the area of employment.

YOU MUST BE ABLE TO

- -pass written and oral Civil Service examinations;
- -read blueprints, engineering drawings and electrical diagrams;
- -speak clearly;
- -write understandable reports (typing is helpful but not required);
- -make decisions and not be easily swayed;
- -tolerate working out of doors in bad weather.

DOT 182.267-010

PREPARATION AND TRAINING:

The building inspector is required to have a high school diploma. You will find that background in technical mathematics, drafting, industrial arts and English (writing reports) especially helpful.

COURSE OF STUDY:
- Mathematics
- English
- Architectural details
- Mechanical Drawing
- Structural Materials
- Structural Stress and Inspection
- Mechanical Construction
- Electrical Work
- Legal Factors in Construction Inspection

SPECIAL ENTRY REQUIREMENTS:

- -high school graduation with background in industrial arts curriculum is helpful;
- -gain experience as a construction worker;
- -apprenticeship especially valuable;
- -may secure employment from private builder if well known;
- -several years of experience in construction field is usually required;
- -an examination is required for civil service positions.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

About seventy-five percent of all building inspectors work on government service at the local, county or state level. The field is not rapidly expanding, despite the increase in construction expenditures because the type of building has shifted from volumes of private homes to large industrial buildings where fewer inspectors are required.

ADVANCEMENT

Qualified inspectors may be promoted to more difficult assignments or to supervisory and technical classifications.
In private industry, they may become construction superintendents.
In civil service, promotion is dependent upon passing examination for higher level positions.

MORE ABOUT THE JOB:

The building inspector checks construction of new buildings, alterations or additions to old buildings to assure they conform to building codes. If he/she works for an architect, general contractor, owner or federal or state government, he/she assures the employer that the specifications of structural methods, materials and work are met.

The building inspector will often examine both the structural and mechanical features of a building, including the site, soil, foundations, framing, heating, ventilations, plumbing and electrical installations.

Depending upon the nature of the building project, the inspector may work on thirty or more buildings at the same time. Or, as small installations, may be checking on 300 to 600 permits at one time. Inspectors may plan visits to coincide with completion of various phases of the job that required inspection.

If they find any substandard work being completed, they must notify construction forman or job foreman of deviation from code. He/she may actually have to issue a stop work order in cases of deliberate non-conformance.

The building inspector:

-may also issue building permits;
-may keep records and may have to submit detailed reports to court on those that might involve litigation;
-may have to testify in court.

JOB CLUSTER #4

"Construction"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$200-220/wk	$180/wk	$200/wk

Salaries may vary throughout the state and are likely to be higher in larger cities. You may wish to check a local source for accurate salary information for your area.

HOURS OF WORK

Normal forty hour week.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

paid vacation and holidays
health insurance
pension plans
sick leave

VV10579

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Check with your local city government for information about building inspectors.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

American Society of Construction Inspectors
P. O. Box 1234
New York, New York 10008

International Conference of Building Officials
5360 Workman Mill Road
Whittier, California 90601

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Customs inspector	168.267-022
Electrical inspector	729.387-022
Immigration inspector	168.167-022
Postal inspector	168.267-062
Plumbing inspector	168.167-050

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB:

BUILDING SUPPLIES SALES ASSISTANT (D.O.T. General Hardware Salesperson)

BUILDING SUPPLIES SALES ASSISTANTS sell hardware, such as builder's hardware, electrical equipment, household hardware, paints, plumbing supplies and woodworking equipment. They advise, demonstrate and explain the uses of these materials for the repair and improvement of buildings of all types. They also may be "field representatives" and call on contractors, architects and purchasing agents selling supplies.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Neat appearance	Verbal	Good color vision
Courteous	Numerical	Average health
Pleasing personality	Clerical	Average physical coordination
Tact		Good vision (natural or corrected)
Efficient		

YOU SHOULD KNOW THAT

-you should have good memory in order to locate and identify the many items of merchandise sold;
-if you have had experience in the building trades, chances of employment are much greater;
-you should have a preference for working with people - this is very important.

YOU MUST BE ABLE TO

-communicate effectively with the public and fellow workers;
-create confidence in the product you are selling;
-use business math quickly and accurately.

DOT 279.357-054

PREPARATION AND TRAINING:

High school is preferred by all employers. You should understand that those who have completed their education will receive preference over those who have not. Also, when considering promotions, most employers will consider first those who have finished their education.

RECOMMENDED HIGH SCHOOL SUBJECTS:

High school can rarely give you all the background for the job, but can give you a start. Classes are available which will give you a basic background and then you can go on to college or on-the-job training. A class in retail sales is very good, as are English and speech courses. Other important classes should be metal shop, wood shop, drafting, electricity, math and any industrial art-related classwork.

ADDITIONAL FACTS ABOUT TRAINING:

Most training is received on-the-job and can take from six months to two years to reach proficiency. Sales ability and experience in other related jobs will greatly decrease the time of training. A trainee must have broad knowledge of the products and their quality and uses. Being continually alert for new products and their application aids in good sales. A basic accounting course is good.

A period of knowledge application by working with a construction company in the field broadens product familiarity.

Those with engineering abilities and a good knowledge of building codes have better opportunities in this field.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Rapid population growth has resulted in expansion of existing stores and the opening of new establishments and branch outlets in smaller communities and suburban areas. This development has created new job opportunities for building materials and supplies sales assistants.
Employers report good opportunities for young people in this industry. They are worried about the potential shortage of sales assistants in this area. This shortage may become acute because young people are not rapidly attracted to sales careers in this field because of low entry pay and the fact that future earnings, though they may be substantial, are uncertain.
Chances of employment are greatest in the larger cities. Most smaller communities have smaller turnover rates and it is harder to find employment there than in the bigger cities.

ADVANCEMENT

Building materials sales assistants may be promoted to manager of a section or department in a large organization or to a manager in a branch office.

MORE ABOUT THE JOB:

Building supplies sales assistants sell building materials, equipment and supplies such as heating or air conditioning equipment, building insulation, bricks or lumber, hardware, plumbing fixtures and roofing. Building construction and being able to read blueprints are things they must know.

Customers include people with little knowledge of materials to be purchased as well as carpenters, plumbers, painters, electricians and contractors.

The building supplies sales assistant usually works from materials and parts catalogs. They may read and interpret schematics, drawings and blueprints in order to answer customers' questions and to assist the customer in selecting proper materials as well as working up building and project estimates.

Sales are completed by writing an order on a sales slip, accepting cash and making change or arranging for further payments. The salesperson must have a working knowledge of contract sales and credit requirements.

As part of the duties, the sales assistant may restock shelves and bins and assemble and set up displays of merchandise. Inventory is usually taken periodically.

Working conditions are usually nice, pleasant, neat, climate-controlled rooms. "Outside work" in a lumber yard may be uncomfortable on very hot or cold days. Walking and standing are common as well as sometimes having to move or lift heavy bulky articles.

Sales assistants may be required to use calculators, typewriters and adding machines. In some jobs, they may drive a fork lift occasionally and may be required to deliver building materials to a given job site by truck.

JOB CLUSTER #12 "Marketing and Distribution"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40-44	$720-1,000/mo	$830/mo	$720/mo

Many firms work on a salary plus commission basis. During training, you may be hired as a stock clerk and be paid minimum wage.

HOURS OF WORK

The workweek is usually forty to forty-four hours. Some Saturday work is required. You usually have holidays off. There may be some night work depending on the place of employment.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

paid vacation and holidays
retirement plan
health insurance
sick leave
paid overtime

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LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Check with a building supplies, paint or floor covering store for further information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

National Association of Wholesalers
1725 K Street, N.W.
Washington, D. C. 20006

Montana Hardware and Implement Assn.
506 N. Lamborn
Helena, Montana 59601

Montana Building Materials Dealers' Assn.
325 Fuller Avenue
Helena, Montana 59601

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Oilfield Supplies & Equip. Sales Representative	274.357-058
Building Equipment & Supplies Sales Representative	274.357-018
Hardware Suppliies Sales Rep.	274.357-034

D.O.T. Fourth Edition, page 215

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: BULLDOZER OPERATOR

The BULLDOZER OPERATOR drives a diesel-powered tractor with a steel blade on the front. He/she levels and distributes earth, moves rocks and boulders, and in general readies an area for construction or farming purposes.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Like to make improvements	Ability to follow instructions	Good general health
Accurate, precise work habits	Average learning ability	Above average strength and endurance
Perseverance	Ability to understand details from sketches and blueprints	Normal vision and hearing
Interest in mechanics		Average spatial ability
Like to work with others		Average motor coordination

YOU SHOULD KNOW THAT

-considerable dust and dirt is a normal part of the job. Those whose eyes, ears, nose, throat and lungs cannot withstand this condition should not consider being a bulldozer operator.
-work is done out of doors.
-there are hazards that accompany the heavy machinery.
-the work may be seasonal.

YOU MUST BE ABLE TO

Lift 100 pounds maximum with frequent lifting and/or carrying of objects weighing up to 50 pounds.

DOT 850.663-010

PREPARATION AND TRAINING:

A high school diploma is required. A formal apprenticeship program is offered in some areas. This consists of on-the-job training combined with related classroom instruction in technical subjects.

RECOMMENDED HIGH SCHOOL COURSES:

Shop	Drafting	Physics
Driver Training	Mechanical Drawing	

The Missoula Technical Center offers a course in heavy equipment operation.

ADDITIONAL FACTS ABOUT TRAINING:

A commercial driver's license is essential. Most employers require a physical examination.

PROSPECTS AND OPPORTUNITIES:

AVAILABILITY TRENDS

Opportunities are with utility companies, manufacturers, and other business firms which do their own construction work as well as state and local public works and highway departments.

ADVANCEMENT

Advancement usually comes in the form of more pay for larger equipment.

MORE ABOUT THE JOB:

The bulldozer operator moves levers and pushes pedals to maneuver the tractor to raise, lower, and tilt controlled tool bars, carriers, and discs.

He/she must estimate the depth of cut by feel of lever and stalling action of engine.

The operator also drives the bulldozer in successive passes over terrain to raise or lower the terrain to attain specifications.

The work is active and strenuous.

The operation of a bulldozer is physically tiring because the constant moving of the machine shakes or jolts the person operating it.

You may be required to live away from home in order to work on some construction projects.

The work is performed outdoors; consequently, the bulldozer operator usually works steadily during the warmer months and may experience slow periods during the colder months.

JOB CLUSTER #4
"Construction"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	40		Journeyman Scale	$11.72/hr

*Beginning salaries depend upon training. If in an apprenticeship program, percentage of journeyman wages are paid with increases at different intervals of training.

HOURS OF WORK

The forty-hour week is usual. However, during summer months you may work as many as 60 hours a week.

FRINGE BENEFITS

Depending on length and place of employment, you may receive the following:

health insurance pension benefits paid vacations an holidays

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Check with a construction contractor for further information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

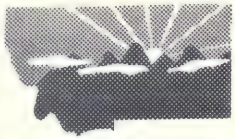
Associated General Contractors of America, Inc.
1957 E. Street, N.W.
Washington, D.C. 20006

For apprenticeship information contact:

Administrator
Montana Operating Engineers & A.G.C.
Joint Apprenticeship Council
1710 9th Avenue
Helena, MT 59601

RELATED OCCUPATIONS:

JOB TITLE:	D.O.T.#:
Dredge operator	850.663-010
Power shovel operator	850.683-010
Rock drill operator	850.663-010
Miner	850.381-010



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: BUS DRIVER

BUS DRIVERS, following definite routes and schedules, transport passengers to and from work or other cities.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Emotional stability	General intelligence	Eye-hand-foot coordination
Responsible	Clerical	Good eyesight
Courteous	Mechanical	Good general health
Tactful	Ability to judge distances	Good depth perception
Alert		

YOU SHOULD KNOW THAT

- -possible hazards of the job include highway accidents, nervous strain, eyestrain;
- -you may be required to join a union;
- -you must have a valid chauffeur's license and a good driving record to be employed;
- -upon employment, you will receive supervised training in the operation of motorized buses.

YOU MUST BE ABLE TO

- -safely drive a large bus in town or on the highway;
- -make emergency repairs on bus, such as changing flat tires;
- -give information to passengers;
- -keep simple clerical records of all transactions and accidents;
- -sit for long periods.

D.O.T. 913.463-010

PREPARATION AND TRAINING:

A high school education is generally the minimum, although some companies have no set educational requirements.

RECOMMENDED HIGH SCHOOL SUBJECTS:

English	Auto Shop
Mathematics	Metal Shop
Machine Shop	Driver's Training

ADDITIONAL FACTS ABOUT TRAINING

Most employers provide a training program for new employees where the candidate drives buses without passengers under the guidance of an experienced driver. Any background in driving cars or buses is helpful, and training in mechanics is valuable. At conclusion of the training period the new driver is required to pass a written and final driving examination before going on a run.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Turnover is relatively slow.
Opportunities are expected to decline in the future.

ADVANCEMENT

With sufficient experience and/or additional training, the bus driver can become a dispatcher, head supervisor or instructor.

Promotions are limited to assignments on more desirable runs.

MORE ABOUT THE JOB:

The bus driver reports to a bus terminal or garage, takes an assigned bus, then drives over a designated route. The driver's duties may include:

-collecting change, tokens, or passes from passengers;
-assisting passengers with baggage;
-regulating bus heating, lighting, and ventilating systems;
-observing local traffic regulations;
-reporting delays or accidents;
-recording cash receipts and ticket fairs;
-inspecting bus before departing and making repairs or changing tires;
-maintaining order and safety rules;
-giving information to passengers as to routes, transfer routes, and street locations.

JOB CLUSTER #15

"Transportation"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
30-70	Salary is computed by various means: flat weekly, flat monthly, hourly wage, or on the basis of mileage. As a general rule, monthly salaries range from $1,000-1,500.		

HOURS OF WORK

The work averages forty hours a week. Saturdays and Sundays are considered regular workdays.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

life and health insurance	expenses when away from home
paid vacations	union benefits
pension plan	holiday or premium pay

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LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Talk to a driver of a Greyhound or Intermountain Bus, or the personnel director of a bus company.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

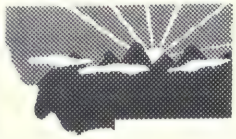
Amalgamated Transit Union
5025 Wisconsin Avenue, N.W.
Washington, D.C. 20036

National Association of Motor Bus Owners
839 Seventh Street, N.W.
Washington, D.C. 20006

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Transit operator	913.167-014
Taxi driver	913.463-018
Motor operator (railroad trans.)	910.683-014
Braker (passenger train)	910.364-010

D.O.T. Fourth Edition, page 886



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: BUYER

The BUYERS hold very important positions in any retail store. They select the merchandise to be sold in the store and outline the selling program for the merchandise they have bought. The buyer experiences both successes and failure in the goods purchased. They must have information as to what the customers like and dislike. The buyers must keep accurate records so that they will know what the trends are as well as the level of the buying public the store serves.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Persuasiveness	Verbal ability	Good general health
Initiative	Clerical	Stamina
Outgoing	Be able to accept defeat without giving up	Good grooming
Enthusiastic		
Like people	Work under pressure	
Self-discipline		
Honesty		

YOU SHOULD KNOW THAT

-good taste and good appearance are very important;
-this is a highly competitive field;
-experience in retail selling is an extremely important background.

YOU MUST BE ABLE TO

-work under great pressure;
-accept setbacks without giving up;
-have a merchandising flair;
-work in varied areas, traveling extensively;
-be at ease dealing with all kinds of people;
-analyze trends and potential market.

D.O.T. 162.157-018

PREPARATION AND TRAINING:

A high school diploma is the minimum required. Many employers favor those with some college training in merchandising. Without a degree, considerable sales experience will be expected.

RECOMMENDED HIGH SCHOOL SUBJECTS:	English	Art
	General Business	Sales
	Mathematics	Public Speaking
COURSE OF STUDY AFTER HIGH SCHOOL:	English	Sales
Business Administration	Buying	Business Management
Marketing	Public Speaking	Art
Merchandising		

ADDITIONAL FACTS ABOUT TRAINING:

Keen competition exists to get into the field. Despite a large number of trainees, employers still complain that there is a shortage of high caliber people for promotion into buying. Previous experience in selling, even part-time while in school, is highly regarded by prospective employers. Many employers are placing more emphasis on college training in addition to the above qualities.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Job opportunities are continuing to expand because of the increase in the number of retail stores and the amount of goods sold.
Buyers are mostly employed by large retail stores.
Smaller stores may require you to both sell and buy, as well as display.
Large stores usually select from their own sales staff.
While competition is keen, there is always room for a good buyer.
Opportunities exist mainly in larger metropolitan areas.

ADVANCEMENT

Opportunities for advancement are unlimited for the person with unusual talent.
Large stores with suburban branches often move trainees in a zig-zag pattern from stocker to sales clerk, head of stock to assistant buyer, to assistant manager to department manager, in a suburban branch to buyer in the parent store.
Trainees can move to the position as a full-fledged buyer in five years if they are good.

MORE ABOUT THE JOB:

The buyer must know both merchandise and the nature of the customers who shop at the store. Buyers must determine which quality of merchandise customers will buy, what type of items will "move", where the "best buys" can be made for the store, and then after having helped prepare budget for buying, order the number of items often six months in advance of their appearance on the floor of the store. The buyer will experience both success and failure. Certain items will not sell; successes must make up for losses.

The buyer will either spend some time actually selling or maintaining close relationships to sales people so as to keep abreast of customers' demands. Purchases will be made from sales people who come around to the store. The buyer will make trips to big centers, like New York, several times a year and will also attend fashion shows.

After merchandise arrives in the store, it will be checked for accuracy, damaged goods and the price established for immediate sale. Normally price is established at cost and retail before purchase.

JOB CLUSTER #11

"Marketing and Distribution"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40 and up	$15,000-20,000 annually		

Salaries may vary from store to store. Check a local source for salary information in your area.

HOURS OF WORK

The forty-eight-hour week is not uncommon. There may be overtime during peak periods. Extended trips several times a year are not uncommon. Although basic hours may be nine to five, there is much night and weekend work involved.

FRINGE BENEFITS

Depending on the length and place of employment, you may receive:

paid vacations and holidays	pensions	sick leave
discounts on merchandise	travel expense	profit sharing
insurance		

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Your local department store can furnish you with further details.

ADDITIONAL SOURCES OF INFORMATION:

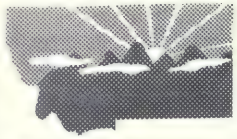
Your school counselor and librarian may also help you find additional information

American Marketing Association
230 North Michigan Avenue
Chicago, Illinois 60600

Association of Buying Offices
100 West 31st Street
New York, New York 10001

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Purchasing agent (any ind.)	162.157-038
Securities trader (finan.inst.)	162.157-042
Procurement services manager	162.167-022



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: CABINETMAKER

The CABINETMAKER is chiefly involved with making and installing wood or plastic fixtures in homes, apartments, institutions and commercial firms. Custom built kitchen cabinets, formica counter tops, made-to-order stereo cabinets, wall panels, bank counters and pulpits are some of the many products of the cabinetmaker's art.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Accurate	Numerical	Eye-hand coordination
Adaptable	Spatial	Physical stamina
Precise	Finger dexterity	Agile
Good judgment		Normal or corrected vision
Decisive		Strong hands
Pride in work		
Dependable		

YOU SHOULD KNOW THAT

-this occupation is not suitable for those suffering sinus or other allergies;
-adequate health and stamina are necessary to perform active work for eight hours;
-most cabinetmakers belong to a union;
-cabinetmaker apprenticeship programs are available.

YOU MUST BE ABLE TO

-lift from twenty to one-hundred pounds;
-use power and hand woodworking tools;
-provide your own hand tools;
-tolerate noise, wood dust and machine vibrations.

DOT 660.280-010

PREPARATION AND TRAINING:

While high school graduation is not required, the background training which high school provides is very helpful.

RECOMMENDED HIGH SCHOOL SUBJECTS: Wood Shop, Metal Shop, Mechanical Drawing, Mathematics

ADDITIONAL FACTS ABOUT TRAINING

Apprenticeship training is the most common way of becoming a journeyman cabinetmaker. This is largely on-the-job training with approximately four hours weekly spent in the classroom.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Employment outlook for skilled craft workers in this trade is very favorable. Opportunities are greatest in urban areas.

ADVANCEMENT

The cabinetmaker, with additional training and experience, may be promoted to supervisor, estimator or superintendent.
The cabinetmaker may open indiviual shop.

MORE ABOUT THE JOB:

The cabinetmaker constructs and repairs wooden articles such as store fixtures, office equipment, cabinets and high grade furniture, using woodworking machines and hand tools. The cabinetmaker generally follows these procedures:

-makes detailed drawings of articles to be made;
-makes specification and materials lists;
-makes layouts by marking and outlining dimensions on paper or lumber stock;
-matches materials for color, grain or texture;
-trims component parts of joints to make them fit snugly;
-glues, fits and clamps parts and sub-assemblies together to form complete unit;
-sands and scrapes surfaces and joints;
-installs hardware such as hinges, catches and fixtures.

The cabinetmaker sets up and operates such woodworking machines as power saws, jointer, mortiser, tenoner, molder, shaper, planers and belt sanders.

The cabinetmaker uses hand tools such as planes, chisels, wood files, drills, hammers, saws, scrapers and screwdrivers.

JOB CLUSTER #4

"Construction"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$12.70/hr Journeyman Scale		

The above figure is based on union rates. Non-union rates may be lower. Also, rates, either union or non-union, may vary throughout the state. You may wish to check a local source for salary information in your area and the apprenticeship program.

HOURS OF WORK

The forty-hour workweek is standard. There is very little overtime.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

medical insurance	retirement plan	paid holidays
life insurance	paid vacation	welfare benefits

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

United Brotherhood of Carpenters and
Joiners of America
101 Constitution Avenue, N.W.
Washington, D.C. 20001

National Association of Home Builders
1625 L Street, N.W.
Washington, D. C. 20036

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Kiln operator (woodworking)	563.382-010
Wood lathe operator	664.382-014
Sheet metal worker	804.281-010
Carpenter	860.381-022

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: CABLE SPLICER

The CABLE SPLICER connects lengths of cable together, a wire at a time, to give continuity to each circuit. The cable splicer takes smaller cables off the main cable to provide neighborhood and individual customer service, installs the related hardware and repairs and maintains cable lines.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Stability in potentially dangerous situations	Ability to work in high places	Excellent health
Desire for public service	Able to work outdoors in all kinds of weather	Good eyesight (natural or corrected)
Responsible	Manual dexterity	Acute hearing ability
Dependable		Good color perception
Patient		

YOU SHOULD KNOW THAT

-cable splicers belong to unions;
-potential hazards of the field are electric shock, falls and cuts;
-accidents are rare, however, because of strict safety regulations.

YOU MUST BE ABLE TO

-work in high places free of undue fear;
-pass rigid physical examination;
-work below ground and in cramped, unnatural positions;
-work outdoors in all kinds of weather when required.

D.O.T. #829.361-010

PREPARATION AND TRAINING:

The cable splicer is trained almost exclusively on the job.

RECOMMENDED HIGH SCHOOL SUBJECTS: Electronics Math

ADDITIONAL FACTS ABOUT TRAINING

Non-high school graduates who are working as helpers can sometimes become cable splicer apprentices provided they can pass an educational achievement test given by their employer.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

For the next several years, the cable splicer will be in demand due to the conversion of overhead wire to underground cables.
The demand for cable splicers is not great in this area.
In the long run, the demand for cable splicers will decrease.
Cable splicers are found everywhere electrical power is supplied.

ADVANCEMENT

Advancement opportunities are limited.
For cable splicers who take courses in electricity and other subjects while employed, promotions to senior splicer and supervisor are possible.
Those with formal training beyond the high school level will generally advance faster in their careers than those without.

MORE ABOUT THE JOB:

Cable splicers work mostly for telephone and electric companies. Military training in skills related to cable splicing are considered by employers and are a definite asset in obtaining a position.

The telephone cable splicer works according to drawings and written instructions known as work order prints and cable cut sheets. The telephone splicer makes a wide variety of splices to establish service for customers and other purposes. After verifying connection, he/she closes cables air tight.

The electric power cable splicer works from drawings and cut sheets to locate circuits and make splices. He/she makes soldered joints and uses special connections to assure good electrical contact and applies special tapes to insulate connections. He/she also installs the oil and pumps that maintain pressure on the cables and all other necessary hardware. They test the oil for air content using graduated tubes and stop watches and make arithmetic calculations.

All splicers must exercise extreme safety in their work and know how to administer first aid.

JOB CLUSTER #3

"Communication and Media"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$6.86/hr*		

*National salary average for the late '70s.

Salary information may vary throughout the state. Check a local source for information in your area.

HOURS OF WORK

A regular forty-hour workweek is the rule. Overtime is expected during emergencies. For those employed by electrical construction companies, work may be less regular.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

paid sick leave
paid vacations
paid medical and insurance plans
retirement plan

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Montana Power Company and the telephone company can provide more information about cable splicers.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Communications Workers of America
1925 K Street, N.W.
Washington, D. C. 20006

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Equipment installer	822.381-010
Precision assembler (aircraft mfg.; electronics)	828.381-014
Household appliance installer	827.661-010
Vibrator equipment tester	825.361.014

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: CAFETERIA COOK

CAFETERIA COOKS prepare meals in school cafeterias. They are responsible for feeding hundreds of students in a short period of time. They work with large amounts of food.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Clean	Numerical	Good general health
Dependable	Finger dexterity	No contagious diseases
Like working with food		Form perception
Not bothered unduly by noise		

YOU SHOULD KNOW THAT

-you will have to be on your feet for long periods of time;
-you must pass a physical examination in order to qualify;
-you will be required to lift heavy loads.

YOU MUST BE ABLE TO

-follow directions from the head cook;
-prepare foods from written recipes;
-add, subtract, multiply and divide when working with recipes.

DOT 313.381-030

PREPARATION AND TRAINING:

Completion of eighth grade is required by most employers. Most schools prefer to hire persons who have graduated from high school.

RECOMMENDED HIGH SCHOOL COURSES: Home Economics
English
Business Math

COURSE OF STUDY AFTER HIGH SCHOOL: The Billings and Missoula Vocational Technical Centers offer courses in food preparation.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

There are school cafeterias in the majority of schools in the state.
Jobs may not always be easy to get because the cook's job takes relatively little specialized schooling; however, training in mass feeding is becoming more of a criteria for selection.
Jobs exist in cities of all sizes.
In smaller school districts, there usually is little turnover of employees so there are not as many job openings.

ADVANCEMENT

The beginning employee who starts as a cook's helper will advance to a qualified cook's position after on-the-job training.
Cooks may become head cooks or cafeteria supervisors; however, the number of openings are limited.

MORE ABOUT THE JOB:

Cafeteria cooks prepare meals for student lunches. They must know how to work with large amounts of food at one time. Cooks are responsible for such things as:

- seeing that recipes are made properly;
- supervising helpers in the preparation of food;
- supervising clean-up operations;
- helping with serving food.

Helpers do such things as:

- peel potatoes and other vegetables;
- make salads, jello and desserts;
- mix dough for biscuits or rolls;
- open cans of fruit and meat and prepare for cooking;
- wash kettles and pans;
- serve meals to students at lunch time.

Cafeteria managers do such things as:

- plan menus in advance and order proper amounts of food using government surplus supplies as much as possible to keep cost down;
- make sure menus provide enough nutrition for students;
- supervise cooks and cooks' helpers to see they do a good job.

JOB CLUSTER #12

"Personal Services"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
35-40	$3.20-4.25/hr	$3.20-3.50/hr	$3.20/hr

Because of varying rates of pay throughout Montana, specific information on salaries may be obtained at your nearby employment office.

HOURS OF WORK

Hours of work are usually from 7:00 a.m. to 2:00 or 4:00 p.m. Monday through Friday. Overtime is rare.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

health insurance	uniforms	paid vacations
retirement plan	paid holidays	free meals

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Talk to the school cook for more information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Council on Hotel, Restaurant, and Institutional Education
Statler Hall
Cornell University
Ithaca, New York 14850

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Chef	313.131-014
Second Cook (hotel & restaurant)	315.381-026
Short Order Cook	313.361-022
Baker	313.381.010

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: CAR RENTAL AGENT

The CAR RENTAL AGENT rents cars to business people, vacationers and other travel bound customers. He/she is also responsible for the legal contracts as well as public relations.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Honesty	Verbal	Good general health
Dependable	Clerical	Normal hearing and eye-sight (natural or corrected)
Tactful	Numerical	Full use of arms and hands
Mature	Able to work under pressure	Color discrimination
Ability to work well with people		Good speech
Well groomed		

YOU SHOULD KNOW THAT

-on-the-job training is provided by employers;
-you may be required to join a union;
-most rental companies have offices in downtown areas and at large hotels and airports;
-tact and good sales ability are key qualities required by employers.

YOU MUST BE ABLE TO

-work well with people, including the customers and co-workers;
-handle complaints and be tactful when refusing some customers;
-keep accurate records of rentals, mileage and charges;
-stand for long periods, usually behind a counter;
-use such machines as a typewriter, adding machine, credit card processor.

D.O.T. 295.477-010

PREPARATION AND TRAINING:

Most employers require high school graduation. College training is not necessary although the candidate hoping to advance to managerial positions may benefit from advanced training.

RECOMMENDED HIGH SCHOOL COURSES:	English	Speech
	Typing	Records Management
	Sales	
COURSES AFTER HIGH SCHOOL:	Human Relations in Business	Business Law
	Speech	Office Management
	Sales	Typing
		Office Practices

ADDITIONAL FACTS ABOUT TRAINING:

On-the-job training will be provided by your employer. Most rental firms have training programs consisting of instruction in sales, tact, customer relations, as well as clerical procedures and rental procedures. Any experience in clerical or sales work will be beneficial.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities are not great in this state.
Prospects should grow better during the next ten years as population and travel increase.

ADVANCEMENT

With sufficient experience and additional training, the car rental representative can advance to: supervisor
manager
zone manager

MORE ABOUT THE JOB:

The car rental agent must make a good impression on prospective customers. He/she must have some knowledge of current and projected vehicle demands. The car rental agent must be able to attract and satisfy customers.

Specific duties include:

-quote cost of rental based on per diem per mile;
-complete rental contract with customer signature and deposit;
-contact people or groups who might need autos for vacations or sight-seeing tours with special weekend rates;
-answer phone and give telephone information;
-interview applicant for car rental;
-if necessary, tell a customer he/she cannot qualify for rental;
-handle customer complaints.

JOB CLUSTER #12

"Marketing and Distribution"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$250/wk*	$155-165/wk	$130/wk

*Top salaries are paid to those in management.

HOURS OF WORK

The car rental representative usually works a standard eight-hour day. The shift may be afternoon, morning or night, and may vary from week to week. Also, the representative may work some weekends with days off during the week. There is little overtime work.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

life insurance	uniform allowance	paid holidays
medical insurance	overtime pay	paid vacations
retirement plan	sick leave	

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Check with your airport or hotel and talk to the car rental agent there for more details.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Avis Rent-a-Car System
P. O. Box 201
Garden City, New York 11530

National Car Rental System Inc.
500 Normandale Road
Minneapolis, Minnesota 55424

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Reservation clerk (r.r. trans.)	238.367-014
Flight information expeditor (air trans.)	912.367-010
Ticket agent (any ind.)	238.367-026
Airplane dispatch clerk	248.367-010

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: CARPENTER

The CARPENTER constructs, erects, installs and repairs structures and fixtures of wood, plywood, metal and wallboard using carpenter's hand and power tools (heavy equipment in commercial jobs) and conforming to local building codes.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Accurate	Numerical	Good physical condition
Precise	Mechanical	Good sense of balance
Pride in work	Spatial	Stamina
Patience	Manual dexterity	Good coordination
Reliable		Normal vision and hearing (natural or corrected)
Work well with others		
Interest in work		

YOU SHOULD KNOW THAT

-carpenters are subject to seasonal fluctuations in employment, although, if a construction company is run properly, there is always some inside work for the better worker.
-bad weather will affect earnings through loss of time.
-hazards are plentiful in the carpenter's trade.

YOU MUST BE ABLE TO

-climb, balance, stoop, kneel, crouch, crawl, reach, grasp and hold.
-work outside and indoors in rough surroundings.
-tolerate noise and dust.
-tolerate cuts and other injuries from sharp tools.
-provide your own protective clothing such as hard hats and safety shoes.
-provide all hand tools to do your job.

DOT 860.381-022

PREPARATION AND TRAINING:

A high school diploma is desirable.

RECOMMENDED COURSE OF STUDY:

Drafting	Mathematics	Building Technology
Shop Courses	Blueprint Reading	Apprenticeship Training

ADDITIONAL FACTS ABOUT TRAINING:

Apprenticeship training is the most common way of becoming a journeyman carpenter. Apprenticeship carpenters receiving on-the-job training are paid about 50% of the journeyman rate with 5% increases each six months.

An apprentice may be advanced faster if they show exceptional ability. After the apprentice advances through the four-year program and passes a written test he/she becomes a journeyman.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Employment of carpenters is expected to increase slowly.
Increased use of prefabricated and pre-cut materials and power operated machinery serves to increase productivity and can lessen the number of carpenters needed.
Opportunities are greatest in urban areas.
Carpenters work for contractors, home builders, trailer and modular home factories, government agencies and as maintenance workers for large manufacturers.

OPPORTUNITIES FOR ADVANCEMENT

The carpenter with experience and additional training may be promoted to journeyman from apprentice, foreman, estimator, construction superintendent and/or contractor.

MORE ABOUT THE JOB:

Carpenters are the largest group of building tradesworkers. They are employed in almost every type of construction activity. They erect the wood framework of buildings, including sub-flooring, sheathing, partitions, floor joists, studding and rafters. When the building is ready for trimming, they install molding, wood paneling, cabinets, window sash, door frames, doors and hardware as well as build stairs and lay floors.

A carpenter:

- lays out work from blueprints and building plans;
- accurately measures lumber using rule, framing square and calipers;
- saws lumber to size with hand or power saws and nails it into place;
- shapes materials to prescribed measurements;
- selects specified type of lumber or other materials;
- applies shock absorbing, sound deadening and decorative paneling to ceiling and walls;
- may do specialty carpentry work such as parquetry floors, finish work and/or acoustical work;
- installs metal decking, metal roofing, siding, metal studs, sheetrocking, shingling and insulating;
- may do rigging for cranes on large commercial jobs.

JOB CLUSTER #4
"Construction"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$12.00/hr Journeyman Scale		

The above figure is based on current union rates. Non-union rates may be lower. Check your local union for specific salary information in your area and apprenticeship programs.

HOURS OF WORK

The forty-hour workweek is standard. There is very little overtime. The carpenter usually works from 8:00 a.m. to 4:30 p.m. with one-half hour for lunch break.

FRINGE BENEFITS
Depending on length and place of employment, you may receive:

- paid holidays and vacations
- medical and life insurance plans
- retirement plan
- pension plan
- bonuses
- free transportation

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LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Local Union Hall #153
Helena, Montana 59601

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

United Brotherhood of Carpenters and Joiners of America
101 Constitution Avenue, N.W.
Washington, D.C. 20001

Associated General Contractors of America, Inc.
1957 E Street, N.W.
Washington, D.C. 20001

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Boatbuilder, wood	860.381-018
Shipwright	860.381-058
Carpenter, maintenance (any ind.)	860.281-010

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: CARTOGRAPHIC DRAFTER

CARTOGRAPHIC DRAFTERS interpret information taken from deeds, surveys, recorded maps, aerial photographs and other sources, and prepare maps to meet the special needs of private industries or local government. Maps may be of a small area, showing ownership lines and property lines; or they may be city, county or state road maps.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Patient	Numerical	Eye-hand coordination
Accurate	Verbal	Full use of hands and arms
Precise	Artistic	Average health
Attention to detail	Clerical	
	Finger dexterity	

YOU SHOULD KNOW THAT

-this work involves much close detail;
-some knowledge of engineering principles and geography is expected.

YOU MUST BE ABLE TO

-use drafting tools skillfully and do free-hand lettering;
-change verbal and numerical descriptions of land into diagram form;
-follow oral and written instructions;
-take up new projects with interest.

DOT 018.261-010

PREPARATION AND TRAINING:

A high school education is essential and some college courses are required for most jobs.

RECOMMENDED HIGH SCHOOL COURSES:	Mechanical Drawing	Government
	Geography	Advanced Math Classes
	Art	English
	History	
COURSES OF STUDY AFTER HIGH SCHOOL:	Engineering	Advanced Drafting
	Graphics	Geography
	Trigonometry	Art

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities in the State of Montana are limited.
Employment opportunities exist in government and private industry.

ADVANCEMENT

There are many ways for a cartographic drafter to advance.
Opportunities may occur for advancement to supervisory positions or, with further training, to do more technical advance work such as a planner or researcher.
Advancement is usually by merit only.

MORE ABOUT THE JOB:

The cartographic drafter makes maps from data obtained by research or from information already at hand.

Duties may include:

-doing research for all available information on an area to be mapped using recorded survey maps, boundary descriptions, field notes and aerial photographs;
-drafting maps or tracing layouts of existing maps and putting in needed changes;
-making maps of city streets, county roads or maps for brochures;
-using drafting instruments such as drafting pens and ink and scales;
-using typesetting machines to print names of streets and roads;
-locate, explain and interpret technical descriptions of property contained in deeds and assessor's records;
-catalog, index and file maps for future reference.

You should have knowledge of terminology, techniques and equipment used in drafting.

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$9,800-15,000/yr	$10,500/yr	$9,800/yr

Salaries vary widely depending on skills at entry level.

HOURS OF WORK

The cartographic drafter normally works a regular nine to five day, five days a week.
Overtime is usually offered, but overtime isn't common.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

paid vacation
retirement plan
health insurance
overtime pay

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LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Employment Security Division
P. O. Box 1728
Helena, Montana 59601

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Assn. of American Geographers
1710 16th Street N.W.
Washington, D.C. 20009

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Detailer (prof. & kin.)	017.261-018
Technical Illustrator (prof.& kin.)	017.281-034
Geographer	029.067-010
Map Editor	018.261-018
Topographical Drafter	018.261-014

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: CASHIER, GENERAL

A CASHIER receives money (or legal tender) from customers, patients or employers in payment for goods or services and keeps records of all transactions. In many instances, other duties are required of the Cashier.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Neatness	Numerical	Good general health
Dependablity	Verbal	Finger dexterity
Pleasing personality	Intelligent	Eye-hand coordination
Honesty	Able to perceive detail	No communicable diseases
Integrity		

YOU SHOULD KNOW THAT

-ability to operate an adding machine is a must.
-employers expect you to be on time and well groomed.
-you may be expected to serve a one-month training period.

YOU MUST BE ABLE TO

-deal diplomatically with people.
-be sympathetic and understanding.
-enjoy business contacts with people.
-work with people who are under emotional stress.

DOT 211.462-010

PREPARATION AND TRAINING:

Most employers prefer a high school diploma or the equivalent.

RECOMMENDED HIGH SCHOOL COURSES.

Business Math	Business Problems
Bookkeeping	Business Machines
Typing	Speech
Modern Recording Equipment	

COURSES OF STUDY AFTER HIGH SCHOOL

Business Math	Accounting
Bookkeeping	Fundamentals of Data Processing
Office Procedures	Machine Calculations

ADDITIONAL FACTS ABOUT TRAINING

Courses to meet the requirements of a cashier could also be taken at a business college.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

-Employment of cashiers will increase somewhat due to the increase of population, but most openings will occur where persons retire or stop working.
-Competition for jobs is keen since many openings can be filled by persons who have little specialized training.
-Opportunities will probably continue to be best of those with typing, bookkeeping or other special skills.

ADVANCEMENT
The industrious worker can advance to jobs in the admitting office or to insurance and bookkeeping jobs.

MORE ABOUT THE JOB:

The cashier handles all payments, calculates the balance due and accepts payments.

Additional duties may vary,

The cashier should know that they:

-will work with a number of people during the day;
-will be confined to a small office working between desk and counter;
-must be accurate and able to perform their duties at a reasonable speed.

The cashier may be asked to:

-prepare cash and checks for deposit at the bank;
-pay out cash or write company checks to cover small miscellaneous expenses.
-prepare pay envelopes or paychecks;
-make out tax reports.

The cashier must be able to:

-operate an adding machine;
-be sympathetic and understanding;
-enjoy business contact with people;
-work with people who are under emotional stress.
-pass a physical examination each year.

CLUSTER#2
"Business & Office"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary

Salaries vary throughout the state. Check a local source for accurate salary information

HOURS OF WORK

Hours of work are likely to be quite regular from 8:00 or 9:00 a.m. to 5:00 p.m. five days a week. Overtime is rare. On night shifts, an admitting clerk may handle any cash transactions.

FRINGE BENEFITS

Depending on place and length of employment, you may receive the following:

-paid vacations -paid holidays -paid sick leave
-employee discount -health insurance

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

The personnel manager of a local job service may be able to give you further information

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Bureau of Occupational & Adult Education
U.S. Office Education
Washington, DC 20202

United Business Schools Association
1730 M Street N.W.
Washington, D.C. 20036

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.
Appointment Clerk	237.367-010
Information Clerk	237.367-022
Receptionist	237.367-018
Teller	211.362-018

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: CATALOG ORDER CLERK

CATALOG ORDER CLERKS assist department store customers in selecting mail order merchandise. They also collect money for merchandise, receive orders by telephone and secure credit approval for items purchased on charge accounts.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Courteous	Verbal	Good general health
Tactful	Clerical	Ability to stand for long periods of time
Neat appearance	Numerical	Average hearing
Friendly attitude toward people		

YOU SHOULD KNOW THAT

Catalog order clerks are found in comparatively few stores.
A good telephone manner is important when taking orders by phone.
The job involves a daily routine which does not vary a great deal.

YOU MUST BE ABLE TO

-assist customers in selecting merchandise from catalogs.
-work with accuracy in preparing order forms, getting correct code numbers and prices.
-operate adding machine and cash register.

D.O.T. 249.367-054

PREPARATION AND TRAINING:

High school graduation is preferred by all employers. Students may gain job experience under school work experience programs or working during the Christmas season on a part-time basis.

RECOMMENDED HIGH SCHOOL SUBJECTS:

Business Math	Clerical Practices
Retail Merchandising	Sales Skills

If you are thinking about advancement to a better paying, more responsible job, it would be wise to take business machines and other courses in the business department. English and Public Speaking will help you in meeting and dealing with the public.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Continuing expansion of mail order merchandising assures that there will be a need for catalog order clerks. However, there are relatively few stores, usually a national chain organization, which operate large catalog order departments. This means there are not a great many job openings and most of those occur in the larger cities.

ADVANCEMENT

Opportunities for advancement are many and varied. For the skilled alert worker, there are chances to advance into many sales or clerical positions, depending on your preference.

Because order clerks are found mainly in large department stores, there are opportunities for advancement to credit clerk or into bookkeeping work.

MORE ABOUT THE JOB:

The order clerk's job is to assist customers in selecting the correct merchandise for their needs. In contrast to a retail sales clerk, the catalog order clerk usually does not have to sell the customer on an item since his or her very presence at the catalog desk indicates some type of purchase.

Specific duties of the catalog order clerk include:

- assisting the customer in locating merchandise in the catalog
- aiding the customer in selecting quantity, size, style and color of items desired
- preparing order form
- receiving cash payment for merchandise
- preparing shipping instructions and computing shipping costs
- initiating credit checks of customers who wish to purchase expensive items on charge accounts
- accepting orders by telephone, carefully verifying that the correct page and order number are being used
- calling customers when orders arrive
- verifying that the correct merchandise has been shipped and collecting payment for the delivered goods
- checking the store room to secure items for the customer or directing them to other warehouse areas where the items may be picked up

JOB CLUSTER #2

"Business & Office"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40*	$130-$185/wk	$165/wk	$130/wk

* Rural communities may have 48 hour workweeks.

Salaries may vary with store size and geographic location. Check a local source for salary information in your area.

HOURS OF WORK

The forty-hour workweek is standard. However, many firms are open several nights a week and on weekends, so the catalog order clerk may work staggered shifts and have only an occasional weekend off.

FRINGE BENEFITS

Depending on the place and length of employment, you may receive the following:

retirement plan	life insurance	health insurance
paid overtime	profit sharing	sick leave
paid vacations	paid holidays	employee discounts

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Talk to the personnel manager at the nearest catalog order store.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

RELATED OCCUPATIONS:

JOB TITLE:	D.O.T.#:
Claims clerk (insurance)	209.262-010
Court clerk	243.362-010
Library assistant	249.367-046
Safe-deposit rental clerk (banking)	295.367-022

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: CEMENT MASON

CEMENT MASONS are the construction tradespeople who finish the cement and concrete poured for construction jobs of all kinds.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Tolerance for hard work	Average intelligence	Good health
Prefer outdoor activities	Spatial ability	Good eye-hand coordination
Dependability	Motor coordination	Full use of arms and legs
Patience	Manual dexterity	Good stamina
Normal capacity for making judgments		Normal corrected vision
Preference for physical work		Good depth perception

YOU SHOULD KNOW THAT

-most beginners train as apprentices before they qualify as a cement mason.
-cement mason work is seasonal and slack periods occur during rainy or winter periods.
-most cement masons need automobiles of their own because of rapidly changing job sites and distances involved.

YOU MUST BE ABLE TO

-work out of doors the majority of the time.
-do a great deal of bending, stooping, kneeling, and reaching.
-work rapidly when conditions demand it.
-follow written and spoken instructions accurately.
-sometimes travel long distances to work.
-work above the ground while on ladders and scaffolding.

DOT 899.364-010

PREPARATION AND TRAINING:

Completion of high school will provide you with better preparation for the tests required to qualify for an apprenticeship, as well as for the academic subjects you must later master during your apprenticeship period. Some cement masons learn on the job.

Specialties in the armed forces, particulary in the Sea Bees and Army Engineering Corp., provide training in cement work which will qualify you for an apprenticeship and shorten required training time.

RECOMMENDED HIGH SCHOOL SUBJECTS

- Mathematics
- Mechanical Drawing
- Shops of all kinds
- Architectural Drafting

PROSPECTS AND OPPORTUNITIES:

JOB TRENDS

Cement masons are employed by both general and cement contractors.
A few cement masons are employed by city, county, and state agencies.
Opportunities are good for those wishing to become cement masons due to continued construction activity.

ADVANCEMENT

After the apprenticeship period, most cement masons qualify for journeymen status.
Well qualified journeymen cement masons with leadership skill may be promoted to supervising positions at better pay.
Cement masons who accumulate money to invest may go into the cement contracting business for themselves.

MORE ABOUT THE JOB:

Cement Masons and Apprentice Cement Masons perform their work on construction sites, highway construction projects, sidewalks, and smaller jobs as homes

-Principal duties include cement finishing with the aid of machines and hand tools
  -Checking forms, which will hold the cement in place, for strength, depth, and proper size
  -Pouring the cement or directing others who might pour it
  -Superivsing or performing an operation which settles-the cement (brings the smooth part to the top)
  -Performing the final finishing operation
  -Smoothing the rough poured surface

Cement Masons use both hand and machine tools

-Trowels	-Edgers	-Floats
-Screed	-Spreaders	-Grinding Machines
-Cutting Machines	-Power Operated Trowels	

-On large jobs, such as buildings and highways, a Cement Mason is likely to work as part of a crew which include Helpers and Apprentices, performing the less skilled parts of the project under the supervision of the Journeyman Cement Mason.

The Cement Mason usually works along with one or two additional Journeymen or Apprentices on small jobs such as driveways, porches, and patios

JOB CLUSTER #4
"Construction"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	40	$7.77/$10.01		$7.77

Salaries will vary throughout the state. Many factors are reflected in determining salaries, such as, union or non-union, apprentice or journeyman and whether or not the work is seasonal. Check your local union or employment service for accurate information for your area.

HOURS OF WORK

The normal workweek consists of forty daytime hours Monday through Friday. Night and overtime are not usual, and occur only when a section of cement must be completed after the normal working day is finished.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

health and welfare plans	employer apprenticeship training contributions
pension plans	premium paid for any night, weekend or overtime work
paid vactions	

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Check the index for further information on the apprenticeship program.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Bricklayers, Masons, and Plasterers
International Union of America
815 15th Street, N.W.
Washington, D.C. 20005

Bureau of Apprenticeship & Training
Department of Labor and Industry
Helena, MT 59601

RELATED OCCUPATIONS:

Job Title	D.O.T.
Concrete-Stone Finsher	844.461-010
Cell Maker (chem.)	844.681-010
Concrete Rubber	844.684-010
Cement Sprayer Helper	844.687-010

D.O.T. Fourth Edition, page 848

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: CHEMICAL ENGINEER

The CHEMICAL ENGINEER performs a variety of engineering functions including designing chemical plants and equipment, determining new chemical processes and applying various principles of physics, mathematics and chemistry to obtain the most effective manufacturing process.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Thorough	Scientific	Good general health
Dependable	Verbal	Normal vision & hearing (nat. or corr.)
Mental alertness	Mechanical	Eye-hand coordination
Patient	Numerical	Finger dexterity
Attention to detail	Some clerical	Non-allergenic skin
Good memory		Color perception

YOU SHOULD KNOW THAT

- -a bachelor's degree is the minimum, and for advanced positions, a master's degree may be required;
- -the chemical engineer is involved in every dimension of engineering: plant design, process design, chemical analysis;
- -most chemical engineers are employed by private industry;
- -specialization is becoming increasingly popular;
- -chemical engineers must have scientific and intellectual curiosity and aptitude;
- -chemical engineers must absorb and apply great amounts of scientific and technical knowledge.

YOU MUST BE ABLE TO

- -learn, absorb, and apply great amounts of scientific and technical knowledge;
- -work well with others, including professional colleagues from other scientific and engineering disciplines;
- -assume the responsibility for making important decisions;
- -perform a variety of different duties effectively and efficiently.

DOT 008.061-018

PREPARATION AND TRAINING:

The minimum educational requirement for entry into the profession is a bachelor's degree from an approved college or university. For the better paying and more advanced positions, a master's or doctor's degree in chemical engineering may be required.

RECOMMENDED HIGH SCHOOL SUBJECTS:

The high school student should pursue a college preparatory course of study with particular emphasis on the sciences and mathematics. Additional courses might include English, mechanical drafting, foreign language and other liberal arts courses.

UNDERGRADUATE COLLEGE COURSES:

The undergraduate course of study will include instruction in mathematics, physics, chemistry, social sciences, English and a variety of engineering courses.

GRADUATE COURSES:

During the graduate training period, the candidate will concentrate on one speciality. The chemical engineer will receive advanced instruction in both chemistry and engineering.

ADDITIONAL FACTS ABOUT TRAINING:

The chemical engineer can plan on spending four or five years working on a bachelor's degree and an additional one or two years for a master's degree. An additional three to five years for a doctorate will be required. Once a candidate has received a bachelor's degree, employment can be found while working toward an advanced degree. Many colleges offer work-study programs where the candidate spends alternating periods on the job and in school.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities are best in large urban areas.
There are openings in all types of industries: fertilizer, paint, drugs, nuclear products, munitions, as well as government service.

ADVANCEMENT

Advancement usually comes in the form of salary increases.
Other areas of advancement include:

- promotion to head chemical engineer;
- production superintendent;
- lecture invitations;
- consultant to firms or government;
- contributing articles to professional journals.

MORE ABOUT THE JOB:

The chemical engineer is both a chemist and an engineer, and combines a thorough knowledge in both areas to determine the most efficient and effective method for producing chemicals. The chemical engineer uses principles of physics, mathematics and chemistry and may be employed by private industry, educational institutions or government service.

Specific duties may include: planning, designing and constructing chemical plants; planning, designing and constructing manufacturing equipment; making feasibility studies for a proposed project; designing alternative production processes; estimating production costs; planning transportation and storage facilities; making special studies; operating pilot plants to test new processes.

Areas of specialization include: oxidation research and work; polymerization research and work; hydrogenation research and work; distillation research and work; manufacturing of a specific product; research and development; chemical production; plant operation; plant design; teaching.

JOB CLUSTER #10

"Manufacturing"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$10,000-21,000	$14,800/yr	$10,000/yr

The salary range varies widely and as a general rule, candidates with master's and doctor's degrees earn substantially more than a candidate with a B.A. degree.

HOURS OF WORK

The chemical engineer generally works an eight-hour day, five days a week. The hours may be longer when an important project is underway during which time evening and weekend work may be common.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

retirement plan	life insurance	disability protection
health and medical care	sick leave	paid vacations & holidays

VV10579

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Montana College of Mineral Science and Technology
Butte, Montana 59701

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

American Institute of Chemical Engineers
345 East 47th Street
New York, New York 10017

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Electronics Engineer (prof. & kin.)	003.061-030
Civil Engineer	005.061-014
Mining Engineer	010.061-014
Mechanical Engineer	007.061-014

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MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: CHEMICAL LABORATORY TECHNICIAN

The CHEMICAL LABORATORY TECHNICIAN conducts chemical and physical laboratory tests and makes qualitative and quantitative analysis of material.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Curious	Mathematical	Good vision (nat.or corr.)
Enthusiastic	Organization	Good color discrimination
Accurate	Ability to follow instruction	Good eye-hand coordination
Patient	Intellectual ability	Form perception
Dependable		No allergies
Strong interest in laboratory work		Good general health

YOU SHOULD KNOW THAT

-certain allergies would usually bar one from employment in chemical laboratories;
-hazards include chemical burns, cuts and abrasions;
-you often work in an atmosphere of unpleasant odors.

YOU MUST BE ABLE TO

-perform laboratory functions such as handling, weighing, measuring and observing;
-follow oral and written instructions;
-handle expensive equipment safely;
-do routine work safely in a neat and orderly manner.

DOT 022.261 010

PREPARATION AND TRAINING:

High school graduation is a must. For upper level jobs, two or more years of college chemistry may be necessary.

RECOMMENDED HIGH SCHOOL COURSES: Chemistry
Mathematics
Physics

Newly hired receive on-the-job training for a few weeks to get accustomed to methods or procedures. This training may be extended over a two or three-year period for more complex duties.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

The outlook for chemical laboratory technicians in this state is not good. Opportunities will be best for graduates of postsecondary school training programs.

ADVANCEMENT

Advancement opportunities are somewhat limited, but a technician can become a supervisor or switch to technical sales work.
With more education, a technician can become a chemist or an engineer.
Most opportunities exist with either governmental agencies or private industry.

MORE ABOUT THE JOB:

Chemical laboratory technicians perform tests for such purposes as developing new products, materials and processing methods. The technician assumes a great amount of responsibility. Their duties include:

-setting up equipment and instruments;
-supervising amount of supplies available for laboratory areas;
-observing and recording procedures and results of test solutions for use in processing materials.

JOB CLUSTER #10

"Manufacturing"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$180-225/wk	$200	$180

Salaries may vary throughout the state. You may wish to check a local source for accurate information for your area.

HOURS OF WORK

The hours are usually regular and correspond with industry.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

life insurance	bonuses
retirement plan	profit sharing programs

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

ADDITIONAL SOURCES OF INFORMATION:

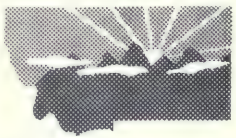
Your school counselor and librarian may also help you find additional information

American Chemical Society
1155 16th Street, N.W.
Washington, D. C. 20036

Manufacturing Chemists Association, Inc.
1825 Connecticut Ave., N.W.
Washington, D.C. 20009

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Laboratory Tester (synthetic fibers)	022.281-018
Physical Tester (plastics mat.)	011.361-010
Bacteriologist	041.061-058
Air Analyst (profess. & kin.)	012.261-010
Core Analyst (petrol. refin.)	024.381-010



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: CHILD-DAY CARE CENTER WORKER

The Child-Day Care Center Worker organizes and leads activities of pre-kindergarten children in both commercial and private nursery schools.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Mature	Verbal	Good general health
Responsible	Numerical	Free of communicable diseases
Patient	Finger dexterity	Good speech
Alert		Good vision and hearing
Neat		Eye-hand coordination
Ability to give directions		
Desire to work with children		

YOU SHOULD KNOW THAT

-much work is part time, usually about four hours a day, five days a week;
-you may be employed by a school operated by a church, private company, private individual, or public group;
-opportunities are limited--the most qualified candidates will get the best positions.

YOU MUST BE ABLE TO

-demonstrate an ability to work with pre-schoolers;
-effectively communicate ideas and skills to young children;
-learn to use the various teaching methods used by the nursery schools;
use a background knowledge of music and art while exposing children to new ideas.

DOT 359.677-018

PREPARATION AND TRAINING:

General Information
The Child-Day Care Center Worker
A minimum of two years of college is desirable
Training can be obtained in a four-year college or junior college
High school graduates may work as helpers in nurseries

Formal Education and/or Training
In high school courses in homemaking, health, physical education, art, English and science are beneficial
In college the course of study generally includes the following:

-Minimum of 8 units in child psychology	-Home Economics
-Art	-Music
-Education	-Sociology
-Physical Education/Recreation	-First-Aid

A Bachelor's degree with a major in child psychology or a closely related field is presently being considered as a minimum requirement for entry in this occupation

PROSPECTS AND OPPORTUNITIES:

JOB TRENDS

Opportunities are greatest in population centers
Opportunities are best for women.
Opportunities are expected to increase as more churches and private firms open nursery school operations.
Opportunities will increase with more mothers going to work.

ADVANCEMENT

With additional training and experience, the nursery school teacher can become:

nursery director
nursery supervisor
nursery owner

MORE ABOUT THE JOB:

-The Child Day Care Worker helps children gain self-confidence by providing them with the opportunity to solve problems within their capabilities. May help with difficult tasks, recognizing individual differences in initiative and independence
-An important part of a nursery school worker's job is the relationship with the parents. The worker and parents exchange information which will be of help in working for the child's best interest at home and at school
- In Nursery Schools:
  -Presents ideas and materials so that children can learn comfortably and enjoyably in an informal environment.
  -Offering activities which invite dramatic, creative and spontaneous play
  -Quiet times of listening to stories
  -Listening to songs, records, or instruments
  -Directing children in eating
-In Nursery Schools for the Handicapped
  -May prepare meals
  -Feed children
  -Regulate rest periods
  -Keep daily anecdotal record
-In Church sponsored Nursery Schools
  -Instruction in religion
  -Work with parent groups

Job Cluster #13
"Personal Services"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary

Salaries vary in this area. Many child day care centers are personally owned and operated and charges per child. Check a local care center for salary information in your area.

HOURS OF WORK

The nursery school teacher, depending on the size of the nursery school, can work either full time or part time. Most nursery schools operate year round, five days a week. Very often, however, work is seasonal and follows the regular schoolyear.

FRINGE BENEFITS

Depending on the length and place of employment, you may receive:

Social Security
health plan

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

A local nursery school could provide additional details.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Department of Elementary-Kindergarten
Nursery Education
National Education Assn'
1201 Sixteenth Street N.W.
Washington, D.C. 20006

Association of Childhood
Education International
3615 Wisconsin Avenue N.W.
Washington, D.C. 20016

RELATED OCCUPATIONS:

Job Title	D.O.T.
Blind Aid (per. ser.)	359.573-010
Teacher Aide	090.227-010
Teacher, Kindergarten	092.227-014
Supervisor, Hospitality House	359.137-010

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: CHIROPRACTOR

CHIROPRACTORS - doctors of chiropractice - are physicians who give special attention to the structure and interaction of the spine and skeleton, nerves, muscles and blood vessels. They treat diseases believed to result from disorders of the nervous system. They stress the importance of keeping the body free from spinal and other defects that may cause illness. To do this, they use chiropractic methods and equipment, x-rays, lab tests and diagnostic tools.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Ability to understand people systematically	Verbal	Good general health
Mature	Scientific	Normal hearing & vision (natural or corrected)
Dependable		Finger dexterity
Stable		Manual dexterity

YOU SHOULD KNOW THAT

-most chiropractors have their own private office or work in chiropractic clinics.
-some chiropractors work for industrial firms.

YOU MUST BE ABLE TO

-lift heavy objects;
-use equipment such as x-ray, electrocardiograph, otoscope and proctoscope.

DOT 079.101-010

PREPARATION AND TRAINING:

Students interested in chiropractic careers should take college preparatory courses in high school. They must complete two years of college study before they can attend accredited chiropractic colleges. Minimum study requirements during these two years of college include six hours of English or communicative skills, three hours of psychology, three hours of social sciences or humanities, six hours of biological sciences with laboratory and six hours of chemistry.

After completing at least two years of acceptable preprofessional training, students in chiropractic colleges must complete four academic years of professional resident study.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

The employment outlook for chiropractors is expected to be favorable through the mid-1980s. Only a slight increase in demands for chiropractic services is expected.

ADVANCEMENT

Opportunities for new graduates to begin their own practice are likely to be best in those parts of the country where chiropractice is most fully accepted as a method of treatment.

MORE ABOUT THE JOB:

Most chiropractors use x-ray extensively to aid in locating the source of patient's difficulties. Many also use such supplementary measures as water, light and heat therapy and prescribed diet, exercise and rest. Some states restrict the type of supplementary treatment permitted in chiropractic practice. Chiropractice as a system does not include the use of drugs or surgery.

JOB CLUSTER #8

"Health"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	$25,000 - $50,000 annually		

HOURS OF WORK

Most chiropractors work in their own offices and set their own office hours.

FRINGE BENEFITS

Because most are self-employed, these vary greatly.

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LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Board of Chiropractic Examiners
Butte, Montana 59701

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

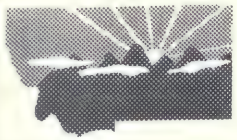
American Chiropractic Association
American Building
2200 Grand Avenue
P. O. Box 1535
Des Moines, Iowa 50317

International Chiropractors Association
741 Brady Street
Davenport, Iowa 52805

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Audiologist	076.101-010
Optometrist	079.101-018
Podiatrist	079.101-022
Speech Pathologist	076.107-010

D.O.T. Fourth Edition, page 63



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: CIVIL ENGINEER

The CIVIL ENGINEER is concerned with the planning, design and construction of all types of systems and structures. He or she may specialize in structural, transportation, traffic, hydraulics, sanitary or construction work. They may also perform supervisory and administrative duties.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Dependable	Scientific	Good general health
Thorough	Mechanical	Normal or corrected vision & hearing
Alert	Verbal	
Creative	Numerical	Eye-hand coordination
Attention to detail		Finger dexterity
Ability to work with others		
Ability to make decisions		
Ability to give orders		

YOU SHOULD KNOW THAT

- -a bachelor's degree in civil engineering is a must and many employers prefer candidates with graduate training;
- -most civil engineers are employed by governmental agencies, but there are also openings in private industry;
- -you may specialize in designing anything from freeways to sewer plants or may do work in several areas.

YOU MUST BE ABLE TO

- -work standing or sitting;
- -spend long periods outdoors;
- -learn and absorb much scientific and technical knowledge and apply it to your job;
- -work well with others including fellow peers and executives;
- -demonstrate a thorough knowledge of engineering principles;
- -pass a civil service examination for any governmental employment.

DOT 005.061-014

PREPARATION AND TRAINING:

A baccalaureate degree in civil engineering from an approved college or university is the usual minimum educational requirement. For many advanced positions, a master's degree may be required.

RECOMMENDED HIGH SCHOOL COURSES:

	English	Drafting
	Chemistry	Physics
	Mathematics	Foreign Language

RECOMMENDED COLLEGE COURSES:

English	Algebra	Calculus
Trigonometry	Geometry	Physics
Chemistry	Drafting	Engineering Graphics
Plane Surveying	Elementary Mechanics	Social Sciences
Properties of Matter	Economics	Data Processing

GRADUATE COURSES:

The graduate program will include training in your specialty area. The degrees earned include Master of Arts and Doctor of Philosophy. For complete list of colleges and universities offering advanced training in civil engineering, see your counselor.

ADDITIONAL FACTS ABOUT TRAINING:

Graduate degrees are usually required only for advanced supervisory positions; most employers require only a bachelor's degree. When you begin work, you will probably perform routine engineering tasks; this will give you on-the-job training.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities are good for qualified, trained candidates.
Opportunities are available in private industry, educational work or government service.
Opportunities are good in rapidly growing and expanding urban areas where there is likely to be an increase in roads and buildings.

ADVANCEMENT

The civil engineer can advance to: project head
engineering director
private engineering company partner

MORE ABOUT THE JOB:

The usual tasks of the civil engineer include:

-designing and supervising the construction of roads, harbors, air fields, tunnels, bridges, water systems, sewage treatment plants, buildings and other structures;
-being concerned with the design, planning, construction and operation of all types of structures and systems;
-may work for a governmental agency, private firm, utilities company, educational institution or other body;
-using principles of mathematics, engineering and physics to determine the best type of structure for a given task;
-working closely to supervise construction of structure;
-usually working in a supervisory or managerial role and has most of the responsibility for the success of the structure;
-using equipment, hand and machine, to carry out various tasks;
-usually specializing in one particular area;
-applying principles such as soil mechanics, geodesy and photogrammetry on the job.

Fields of civil engineering:
-Structural Engineering
-Transportation and Traffic Engineering
-Hydraulics
-Sanitary Engineering
-Construction

JOB CLUSTER #4

"Construction"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$15,500-25,000	$16,800-18,000	$15,500

HOURS OF WORK

The civil engineer usually works an eight-hour day, five days a week, with little overtime or weekend work. Extra work may be necessary during important projects in order to meet deadlines.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

retirement plan	sick leave	expense account
furnished transportation	health & medical coverage	paid vacations & holidays
disability plan	life insurance	

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LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

ADDITIONAL SOURCES OF INFORMATION:

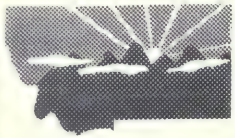
Your school counselor and librarian may also help you find additional information

American Society of Civil Engineers
United Engineering Center
345 East 47th Street
New York, New York 10017

American Federation of Technical Engineers
900 F Street, N.W.
Washington, D.C. 20004

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Airport Engineer	005.061-010
Ceramic Engineer	006.061-014
Chemical Engineer	008.061-018
Transportation Engineer	005.061-038



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: CIVIL ENGINEERING TECHNICIAN

The CIVIL ENGINEERING TECHNICIAN assists the civil engineer in the preparation of specifications for various construction projects. The technician also estimates cost of labor and material.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Adaptable	Numerical	Good eyesight
Methodical	Spatial	Physical stamina and endurance
Accurate	Ability to concentrate	Normal hearing
Responsible	High degree of manual dexterity	
Enjoy working with others		

YOU SHOULD KNOW THAT

-the technician who works on a big specialized construction project may live and work in one area for a length of time needed to finish a project and move to another area.
-two-year courses designed specifically to train engineering technicians are now available in technical training schools and colleges throughout the country.

YOU MUST BE ABLE TO

-make mathematical calculations and use mathematical engineering formulas with ease.
-communicate well with others, both orally and in writing.
-adapt to a variety of tasks; you may perform different duties at each stage of the construction process.
-visualize three-dimensional objects from drawings.

D.O.T 005.061-014

PREPARATION AND TRAINING:

A high school education is necessary.

RECOMMENDED HIGH SCHOOL COURSES:

Mathematics
Physics
Drafting

The technician may prepare for a career in several ways:

-the newly employed worker receives on-the-job training from the supervisor which is usually informal instruction given in the course of regular work assignments
-there are technical schools around the country which offer a two-year course in engineering technology
-some four-year schools offer associated two-year programs in engineering technology

Check with your counselor for further information.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities for civil engineering technicians exist throughout the state. Jobs are available with construction companies, public service and utility companies, and manufacturing companies, railroads, federal, state, and city government.

ADVANCEMENT

A technician with additional education may advance to engineer or a supervisory position.

MORE ABOUT THE JOB:

Some tasks performed by the civil engineering technician include the following:

-design details for structures such as buildings, bridges, water works, drainage systems, and utility tunnels
-the technician may also oversee the erection of structures
-supervise surveying crew or may work with construction supervisor in scheduling work projects
-may assist in testing materials and machinery

The civil engineering technician may specialize or work for specialized civil engineering operations.

JOB CLUSTER #4

"Construction"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$1000-$1200/mo	$925-$1100/mo	$1000/mo

Salaries vary between private industry and the Federal Government. You may need to check further for accurate information.

HOURS OF WORK

The forty-hour workweek is standard. Some overtime may be required. Many times you will work outdoors beginning in the early morning.

FRINGE BENEFITS

Depending on the length and place of employment, you may receive:

paid vacations & holidays travel pay insurance and retirement plans

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

American Society of Civil Engineers
United Engineering Center
345 47th Street
New York, NY 10017

American Federation of Technical Engineers
900 F Street, N.W.
Washington, D.C. 20004

RELATED OCCUPATIONS:

JOB TITLE:	D.O.T.#:
Airport Engineer	005.061-010
Highway Engineer	005.167-022
Ceramic Engineer	006.061-010
Chemical Engineer	008.061-018

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: CLAIM ADJUSTER

The CLAIM ADJUSTER processes all claims for damages filed by holders of car insurance and claimants against his/her company's clients. These may vary from simple damage or theft claims involving windshields or hubcaps to complex legal proceedings involving multiple-injury accident claims.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Mature	Verbal	Good general health
Ability to make sound judgments	Clerical	Good eyesight and hearing (natural or corrected)
Tactful	Numerical	
Neat appearance		
Ability to work with people		

YOU SHOULD KNOW THAT

-your chances of employment are best if you have had at least two years of college;
-because of the need for tact and maturity, you will stand a better chance of getting employment if you are twenty-five years old or above;
-there are excellent opportunities to advance from this job into other areas of the insurance business.

YOU MUST BE ABLE TO

-demonstrate the ability to deal with people who are often under stress;
-handle a wide variety of detail work with speed and efficiency;
-learn the terminology involved with automotive repairs and some medical terminology in addition to the terminology used in the insurance business.

D.O.T. 241.217-010

PREPARATION AND TRAINING:

High school graduation is the absolute minimum. Most companies prefer applicants with two or more years of college study, preferably in the field of business administration.

RECOMMENDED HIGH SCHOOL SUBJECTS: English, Business Math, Speech, History, State and Local Government

While not required, typing can be a valuable skill. Auto mechanics, again not a requirement, can help you understand cars and automotive terminology.

COURSE OF STUDY AFTER HIGH SCHOOL: Principles of Insurance, Report Writing, Speech (Communicating with people is of prime importance), Business Math, Economics, Psychology, Business Law, English

ADDITIONAL FACTS ABOUT TRAINING:

Many large companies have on-the-job training programs which last from three months to a year. These include classroom study, observations of professional adjustment practices in the field, and work experience training.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Insurance adjusters are found in cities of all sizes.
Opportunities, particularly for the beginner, are best in larger cities of 50,000 and above.
The overall outlook for employment in this field is good. There has been a great increase in the number of insurance claims filed each year over the past two decades, and indications are that this trend will continue.
While data processing and automation have cut down on some of the detailed work, there is still a basic need for more employees in this occupation because of the personal contact and evaluation work involved.

ADVANCEMENT

The trainee who shows initiative and ability can soon become a qualified adjuster. He/she may then advance to more responsible positions such as claims supervisor or may move into specialty fields such as handling only claims involving major property damage. Opportunities exist in management for the adjuster who shows administrative ability. There are also opportunities to become an independent insurance adjuster.

MORE ABOUT THE JOB:

The claim adjuster is a third party whose job is to fairly evaluate all damages and claims arising from automobile accidents, damage to cars from weather or other hazards, plus theft of equipment from cars or cars themselves.

The claim adjuster may be an inside adjuster who works with clients or claimants only in the insurance company office. Others are outside adjusters who work outside the office estimating damage to cars which are too badly wrecked to bring to the office.

The trainee works with an experienced claims adjuster in estimating material damage to cars. The trainee is able to learn automotive terminology, damage estimating, and how and where to get accident reports from law enforcement agencies, how to contact other insurance companies in settlement claims.

The training period may last from a few months to two years or more, but usually the adjuster is at least partly on his or her own after about three months. During the first year or two, the trainee works closely under a claims supervisor asking questions and receiving assistance. The adjuster may conduct independent investigation (when there are conflicting reports), authorize payment of claims, issue work orders to body and fender shops, consult with physicians about injuries, and confer with attorneys about suits that are pending.

JOB CLUSTER #2

"Business and Office"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$13,000-18,000	$14,750	$13,000

Salaries will vary throughout the state. Check a local source for accurate salary information for your area.

HOURS OF WORK

The normal workweek is forty hours, although some overtime may be required if workloads become excessive. Normal working days are Monday through Friday, although again, there may be some weekend work involved on occasions. Hours are generally 8:00 or 9:00 a.m. to 5:00 or 5:30 p.m.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

profit sharing	credit union	sick leave
retirement plan	health insurance	paid vacation and holidays

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

The personnel department of a local insurance company can provide you with further information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Insurance Information Institute
110 William Street
New York, N. Y. 10038

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Investigator	241.267-030
Claim Examiner (insurance)	241.267-018
Credit Analyst (clerical)	241.267-022

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: CLAIMS CLERK (Insurance)

The CLAIMS CLERK processes insurance claim forms relating to accident claims involving bodily injury or property damage. In large offices, she/he may specialize only in one or the other. She/he may work for insurance companies or for an independent insurance agent.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Interest in clerical work Attention to detail Tact Ability to keep information confidential	Clerical Numerical Verbal	Average eyesight and hearing (natural or corrected)

YOU SHOULD KNOW THAT

- -you may be expected to pass an aptitude and clerical skills test;
- -because insurance matters are usually delicate, a person with judgment, tact and discretion is required to do this job;
- -you will have a better chance for employment if you have had a year or more experience or have participated in a work experience program.

YOU MUST BE ABLE TO

- -perform standard clerical and secretarial functions including handling of mail, file work and typing;
- -be able to operate transcribing machines;
- -demonstrate a minimum typing speed of 45 to 55 words per minute;
- -use the telephone frequently and efficiently.

DOT 241.362-010

PREPARATION AND TRAINING:

A high school diploma is the minimum training accepted. Your chances of getting a job and of advancing to better paying and more responsible positions will be improved if you have some education beyond the high school level.

RECOMMENDED HIGH SCHOOL SUBJECTS:	Typing	Clerical Practices
	Office Machines	Speech
	English	Filing
COURSE OF STUDY AFTER HIGH SCHOOL:	Typing	Clerical Practices
	Business Math	Machine Calculation
	Transcription	Speech
	English	Office Machines

Shorthand is not a specific requirement of most jobs, but it is a desirable skill in positions which require secretarial training.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Jobs are found in cities of all sizes. However, employment opportunities are best in cities of 25,000 and above.

Because of huge increases, both in automotive production, travel and accident claims, there has been a sharp rise in the number of claims clerks employed. Future increase in motor vehicle transportation makes it clear that there will continue to be many job opportunities in this field in the years ahead. The skills required for this job will qualify you for many others in the clerical field.

ADVANCEMENT

The beginning worker may advance in salary and responsibility as she/he demonstrates their abilities. The experienced worker may become a chief claims clerk or office supervisor in a large office. There are also limited opportunities to move into other areas of the insurance field including sales or claims adjusting work.

MORE ABOUT THE JOB:

The claims clerk performs typing and other clerical duties related to the processing of all kinds of motor vehicle accident claims. Duties may include:

-opening and sorting daily mail;
-maintaining "active" and "suspense" files on all claims;
-typing on designated claim forms;
-typing of form and original letters as designated by a claims adjuster or insurance agent;
-receiving and making telephone calls regarding insurance claims;
-preparing repair orders and bank drafts or checks;
-securing accident reports and other information at the request of an adjuster or insurance agent;
-preparing monthly reports and other statements as directed.

The claims clerk may also arrange for, receive and file photographs and other such information pertinent to each claim. She/he may request and process hospital or medical reports, bills incurred because of accident and other information.

Daily telephone contact with persons insured by their employer, claimants against their company and others is required. This demands discretion, tact and good judgment as well as a pleasant and efficient telephone manner.

A decided benefit is the ability to understand insurance terminology, traffic violations and even some legal and medical terminology. Much of this can be learned on the job.

JOB CLUSTER #2

"Business and Office"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
35-40	$130-180/wk	$160/wk	$130/wk

Salaries may vary with companies. You may wish to check a local source for salary information for your area.

HOURS OF WORK

Hours of work are normally quite regular. The workweek varies between 35 and 40 hours depending on the particular employer. The job usually involves a Monday through Friday workweek, although some Saturday work may be required.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

paid overtime	sick leave	retirement plan
paid vacation	paid holidays	health insurance

VV10579

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

The personnel department of a local insurance company can provide you with further information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Insurance Information Institute
110 William Street
New York, N. Y. 10038

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Claims Adjuster (insurance)	241.217-010
Investigator	241.267-030
Credit Analyst (clerical)	241.267-022

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: CLASSIFIED AD CLERK I

The CLASSIFIED AD CLERK I works in the advertising department of a newspaper selling classified ads both at the counter and by telephone. He or she is responsible for helping the customer word the advertising correctly and for scheduling the number of days the ad will run.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Interest in advertising	Clerical	Good general health
Neat appearance	Verbal	
Dependable	Numerical	
Accurate		
Like people		

YOU SHOULD KNOW THAT

-with smaller papers, classified ad clerks may also be expected to do billing and other clerical work or act as a receptionist;
-these jobs will remain in demand with the added requirement of being able to operate the machines that will feed correct copy into the automatic typesetters.

YOU MUST BE ABLE TO

-take ads quickly and accurately, both over the telephone and at the counter;
-help customers with wording ads, making sure spelling is correct;
-process forms so that billing procedures are handled smoothly.

DOT 247.367-010

PREPARATION AND TRAINING:

There is no formal minimum, but all employers prefer applicants with a high school diploma. Some college training with emphasis in business and advertising can lead to better paying jobs in advertising.

RECOMMENDED HIGH SCHOOL SUBJECTS:

English	Journalism
Speech	Business Machines
Typing	Clerical Practices

While it is not necessary for the potential classified ad clerk to attend college, you should know that your chances of getting a job and of advancing to better paying and more responsible positions can be improved greatly with a year or two of college training.

The classified ad clerk job should not be viewed as an end in itself but rather a place to demonstrate ability and move up.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Jobs exist any place there are newspapers, but most opportunities are in metropolitan areas.
Smaller papers usually employ an all-around office worker who can be a receptionist, secretary, or bookkeeper, in addition to advertising duties.
The outlook for classified ad clerks is generally good.
Most newspapers are showing continuing increases in classified advertising lineage and this trend is expected to continue.
Jobs for the qualified worker should be available in most larger towns in the years to come.
There is not a great demand for ad clerks.

ADVANCEMENT

The qualified and alert worker can advance in several ways. They may become a supervisor of other ad clerks or even become classified advertising manager. There are opportunities to move into display advertising or national advertising sales.

MORE ABOUT THE JOB:

The classified ad clerk sells advertising space in daily and weekly newspapers. They may deal directly with customers at the counter or may take ads by phone.

The ad clerk is expected to:

-meet customers at the counter maintaining a pleasant attitude at all times;
-arrange an advertisement in the manner directed by the customer;
-fill out proper forms which insure that the ad will run on the days indicated by the advertiser and will convey the proper message;
-check material carefully with the customer;
-proofread the advertising copy after it is set in type and ready to be run in the newspaper;
-indicate charges to be made and collect cash payment from the customer or initiate billing procedures;
-give information about classified advertising rates to any interested customer;
-handle tactfully the occasional complaints from advertisers.

ADDITIONAL FACTS ABOUT THE JOB:

Typing skills are necessary.
The clerk must be able to speak clearly over the telephone. Telephone selling is becoming a more important attribute, even beyond that of handling incoming calls.

JOB CLUSTER #12

"Marketing and Distribution"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$130-180/wk	$160/wk	$130/wk

Salaries will vary throughout the state. Check your local newspaper for salary information in your area.

HOURS OF WORK

The workweek is normally 40 hours. Most papers are usually open Saturdays with a weekday off. Normal work hours are 8:00 or 8:30 a.m. to 4:30 or 5:30 p.m. with half an hour off for lunch. Workloads will vary.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

sick leave	paid vacation	health insurance
retirement plan	life insurance	paid overtime

VV10579

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Contact your local newspaper for further information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

American Newspaper Publishers Association
750 Third Avenue
New York, N. Y. 10017

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Special certificate dictator (ins.)	209.382-014
Collection clerk (clerical)	241.357-010
Customs entry clerk (gov.ser.)	214.467-010

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MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: CLERGY

Today's CLERGY serves the spiritual needs of their congregation and the community. Some Clergy function primarily in the administrative role of a large church or synagogue: others work as missionaries or in social welfare agencies. Still others teach in educational institutions or seminaries, or serve as Chaplains in the Armed Forces.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Pleasing personality	Writing	Mentally stable
Outgoing	Speaking	Good physical health to withstand long hours and emotional strain
Truthful	Counseling	
Studious		
Flexible		
Steadfast		
Good sense of humor		

YOU SHOULD KNOW THAT

- -You will be on call 24 hours a day to counsel, comfort or bring care;
- -You may be working in depressing atmospheres: such as funerals, hospitals, prisons and mental institutions;
- -The salary is not high in some places;
- -Training may take several years.

YOU MUST BE ABLE TO

- -Work under pressure for long hours and keep an even temper and emotional state;
- -Relate to all people without personal feelings or becoming involved;
- -Keep yourself emotionally free, yet relate through sympathy to the very real emotional states of the individuals with whom you work;
- -Study and translate truths into terms the people understand.

DOT 120.007-010

PREPARATION AND TRAINING:

Educational requirements for entry into the Protestant ministry vary greatly. Some denominations have no formal educational requirements, and others ordain persons having varying amounts and types of training in Bible colleges, Bible institutes or liberal arts colleges. A large number of denominations require a 3-year course of professional study in a theological school or seminary following college graduation. A degree of Bachelor or Master of Divinity is awarded upon completion.

Preparation for the priesthood generally requires 8 years of study beyond high school. There are almost 400 seminaries offering post-high school education. Preparatory study may begin in the first year of high school, at the college level or in theological seminaries after college graduation.

To become eligible for ordination as a Jewish Rabbi, a student must complete a prescribed course of study in a seminary. Entrance requirements and the curriculum depend upon the branch of Judaism with which the seminary is associated.

Students interested in the clergy should check with someone in their denomination for additional information on preparation and training.

PROSPECTS AND OPPORTUNITIES:

JOB AVAILABILITY TRENDS

As our population grows, so will the need for more churches and synagogues. New clergy are needed every year to replace those who die, retire, transfer or become inactive for other reasons. This situation creates a continuous demand for clergy to all faiths.

OPPORTUNITIES FOR ADVANCEMENT

New clergy usually start out as assistants or as clergy of small congregations. They can look forward to having their own parish; work in the fields of teaching, administration, missionary work or becoming bishops, monsignors or writers.

MORE ABOUT THE JOB:

JOB DUTIES

1. Protestant Ministers - There are about 295,000 Protestant Ministers. Services that Ministers conduct vary among denominations and also among congregations within a denomination. In most worship services they lead and administer the rites of baptism, confirmation and Holy Communion. They also perform marriages, conduct funerals and counsel those who seek guidance.
2. Rabbis - There are about 6,500 male Rabbis in 3 branches of Judaism. They are the spiritual leaders of their congregation and teachers and interpreters of Jewish law and tradition. They hold daily services and give sermons on the Sabbath and on Jewish holidays. Like other Clergies, they perform marriages, conduct funderals and give advice and guidance to those who seek it.
3. Roman Catholic Priests - There are about 60,000 Roman Catholic Priests. Their duties include offering the Sacrifice of the Mass, giving sermons, hearing confessions, administering the rites for marriages and funerals, and counseling persons who seek guidance. They often work long hours for the Church and the community.

JOB CLUSTER #7
"Arts and Humanities"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary

Salaries vary from denomination to denomination. Fringe benefits differ making it difficult to determine dollar amount of salaries. You may wish to check with the denomination of your choice for this information.

HOURS OF WORK

Because of the wide range of services provided, the minister may work long or irregular hours.

FRINGE BENEFITS

Fringe benefits will vary. You may receive the following:

-pension plan
-car expenses
-paid vacation
-special gifts
-living quarters and utilities
-sick leave

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LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Write to the headquarters of the denomination in which you are interested.

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Social Worker	195.107-034
Parole and Probation Officer	195.167-030

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MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: CLERK-TYPIST

The CLERK-TYPIST performs general clerical work which usually requires the use of a typewriter. Other office equipment may be used, such as duplicating and calculating machines. Some of the time may be spent compiling reports, typing application forms, bills and shipping tickets. A clerk-typist must work quickly and accurately and must proof-read well.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Accurate	Clerical	Good vision and hearing (natural or corrected)
Neat	Verbal	Normal use of hands and arms
Tactful	Numerical	Finger dexterity
Pleasant	Writing	Eye-hand coordination
Dependable		
Well-groomed		
Even-tempered disposition		

YOU SHOULD KNOW THAT

-this work can be done by people with some types of physical handicaps;
-a clerk-typist must be able to type accurately from plain copy;
-there will be distractions from other machines and people in big offices.

YOU MUST BE ABLE TO

-make computations accurately and with reasonable speed;
-learn assigned clerical tasks readily according to departmental routines;
-understand and follow simple oral or written instructions.

D.O.T. 203.362-010

PREPARATION AND TRAINING:

High school graduation is beneficial. Additional training in a community college or business school is desirable but not always required.

RECOMMENDED HIGH SCHOOL SUBJECTS:

Typing		Business Machines
Business Correspondence		English
Business Math		

Attention should be given to spelling, vocabulary, punctuation and grammar.

COURSE OF STUDY AFTER HIGH SCHOOL

A year or two of training at a business college or college is desirable but usually not necessary. Courses may include:

Typing	Bookkeeping	Business Law
Business Correspondence	Machine Transcription	Shorthand

While these courses are not all necessary to being a clerk-typist, they are helpful when applying for promotion or another job in the office.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

The opportunities for skilled and well-trained clerk-typists are good and will probably grow. The best opportunities in urban areas will be for people who are good candidates for promotion.

ADVANCEMENT

In small offices, promotion is limited. A well-trained and experienced clerk-typist may be promoted to chief clerk or secretary, or receive a salry increase.

MORE ABOUT THE JOB:

The clerk-typist types letters, forms and cards from rough and corrected copies; also files reports and records and does general clerical work. Among the duties of a clerk-typist are:

-sending and receiving mail;
-posting data to record cards;
-searching files to obtain records and reports;
-typing correspondence;
-preparing tables, index cards and special forms;
-answering the telephone and taking messages;
-may operate a telephone switchboard;
-may sort and distribute mail;
-may transcribe recorded material;
-may cut stencils on a typewriter;
-may operate duplicating machines;
-may be asked to perform simple bookkeeping tasks.

JOB CLUSTER #2

"Business and Office"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
37½-40	$615-660/mo		$615/mo

Because of varying salary rates throughout Montana, specific information may be obtained at your nearby employment office.

HOURS OF WORK

The standard workweek for a clerk-typist is forty hours. In some businesses, there is a 37½-hour workweek. Usually working hours are from 8:00 a.m. to 5:00 p.m. with an hour for lunch. Overtime work is rare.

FRINGE BENEFITS

Depending on the length and place of employment, you may receive:

overtime pay	health insurance
paid vacation	retirement plan

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LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Check with a local employer for more information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

United Business Schools Assn.
1518 K Street N.W.
Washington, D. C. 20005

Merit System Council
Capitol Station
Helena, Montana 59601

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Secretary	201.362-030
File clerk	206.362-010
Insurance clerk	219.387-014
Ward clerk	245.362-014
Office clerk	209.562-010

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MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: COIN MACHINE SERVICE REPAIRER

The COIN MACHINE SERVICE REPAIRER keeps the vending and coin operating machines in good working condition. Because modern machines are complex, the repairer may specialize in one type, such as phonographs, games, merchandising or food.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Self-reliant	Mechanical	Normal vision with good color perception (natural or corrected)
Integrity	Numerical	Normal hearing
Personable	Work adeptly with hand tools and small power tools	Above average strength
Tactful		Free from physical handicaps
Dependable		Finger dexterity
Honest		

YOU SHOULD KNOW THAT

- -you may be required to demonstrate mechanical ability in addition to pre-employment tests;
- -you may be unionized;
- -repairers are required to have a valid driver's license and a good driving record;
- -some machines on military establishments require the repairer to pass a security check.

YOU MUST BE ABLE TO

- -lift heavy and bulky objects and move machines;
- -pass a physical examination;
- -work adeptly with hand tools and small power tools to repair electrical circuits, refrigeration, plumbing and mechanical components;
- -work alone on location often with disturbing noises and interference.

DOT 639.281-014

PREPARATION AND TRAINING:

The coin machine service repairer is generally required to have a high school diploma. Background course work in machine repair and basic electricity would be helpful. Some college or technical school training would also be helpful.

RECOMMENDED HIGH SCHOOL SUBJECTS:

Basic Electricity	Metal Shop
Auto Mechanics	English
Reading	Mathematics
Machine Shop	

It would be helpful, when available, to take a program in appliance repair. The Billings Vocational Technical Center does offer such a course.

You will receive most of your training on the job as an apprentice mechanic during which time you will accompany an experienced mechanic on the job.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

The number of machines is expected to increase and therefore the number of repairers needed to service these machines is expected to increase.
Opportunities look good with the major problem being how to obtain training.
Although the demand is not great, there is always a need for coin machine service repairers.
Approximately 6,000 comapnies operate more than six million vending machines.

ADVANCEMENT

With an increase in operations by large companies employing repairers, opportunities exist for advancement to senior mechanics or shop supervisors.
Some mechanics may choose to have their own business, either for repairing on contract basis with operators who own machines and for buying their own fleet of machines.

MORE ABOUT THE JOB:

Most coin machine service repairers work both in repair shops and "on location" where the machines are installed. The industry tends to divide into two groups: merchandising vending and amusement vending. The operators of each are usually independent of each other. The largest part of the merchandising is concerned with food, beverages and cigarettes. Amusement consists mostly of juke boxes and games. Equipment dealers may buy and sell machines and maintain repair shops for both.

In the repair shop, repairers repair complex components of the machines including water pumps, motors, electrical relays. They may overhaul the machines, replacing worn and damaged parts, may assemble new machines following the instructions supplied by the manufacturer. The repairer then test runs the machine after filling with products and checks the dispersal of merchandise and the coin and change mechanism.

The on-location repairer first determines the cause of the trouble by inspecting for loose electrical wires, malfunctions of the coin mechanisms, water leaks and other leaks. Component parts are tested to isolate the defective parts. After locating the problem repairs may be made "on location" or by taking the machine back to the shop.

Preventative maintenance is a major responsibility. This consists of periodically replacing parts subject to wear, cleaning condensers and other refrigeration components, lubricating mechanical parts and adjusting machines to function properly.

JOB CLUSTER #9

"Manufacturing"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$180-300/wk	$220-250/wk	$180/wk

Salaries may vary throughout the state. You may wish to check a local source for accurate information in your area.

HOURS OF WORK

The normal workweek is forty hours, usually five days a week. Overtime and night work may be required to keep machines operating or when emergencies arrive.

FRINGE BENEFITS

Depending on the place and length of employment, you may receive:

paid vacations and holidays
health insurance
life insurance
accident insurance

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LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

National Automatic Merchandising
Association
7 South Dearborn Street
Chicago, Illinois 60603

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Sewing machine repairer	639.281-018
Manufacturer's service rep.	638.261-018
Experimental mechanic	600.260-014
Adjuster (typewriters & parts)	706.381-030
Electrical inspector	620.281-030

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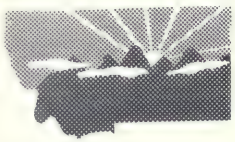

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: COLLECTION CLERK

COLLECTION CLERKS contact customers and notify them of delinquent accounts and attempt to secure payment from them. The job includes many other clerical duties, such as filing, typing, correspondence and records management. They may be called collection and credit clerks, collection correspondents, or past-due account clerks.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Courteous	Verbal	Good health
Tactful	Clerical	Normal eyesight
Honest	Numerical	Normal hearing
Well-groomed		Manual dexterity
Pleasant speaking voice		
Ability to work with others		

YOU SHOULD KNOW THAT

-you must have a preference for working with people and doing clerical work;
-a good deal of your job will be routine and organized work.

YOU MUST BE ABLE TO

-show good judgment and common sense;
-speak well and present your ideas in an effective manner;
-create a sincere and concerned impression and still communicate authority.

DOT 241.357-010

PREPARATION AND TRAINING:

High school is preferred by most employers and required by some. You should understand, though, that those who have completed their education will probably be given preference over those who have not. College or business college training is seldom required but always preferred.

RECOMMENDED HIGH SCHOOL SUBJECTS:		
	English	Introduction to Business
	Speech	Business Math
	Sales Techniques	Typing
	Clerical Problems	Bookkeeping

Most training is obtained on the job. The length of time needed for proficiency varies from trainee to trainee and can take from a few months to a year.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Employment in clerical operations is expected to rise during the next ten years.
Many new positions in clerical and related occupations will be added each year.
Collection clerks will be materially unaffected by automation and job opportunities will remain at least steady.
Employment is usually in banks, credit companies, large department stores and loan companies.
Credit clerks work in cities of all sizes; however, more are found in the larger metropolitan areas.

ADVANCEMENT

Opportunities for advancement depend largely on the experience and training a worker has, but jobs in other clerical areas are available.
Collection clerks may advance to office supervisor or loan application clerk.

MORE ABOUT THE JOB:

Collection clerks contact customers in an attempt to secure payments from them on delinquent accounts. Telephone calls or letters are used in first attempts to collect payments of bad accounts.

When an account becomes overdue, credit clerks remove the delinquent account from the file, select the proper form for the particular case, and mail it to the customer. The process is repeated if no response is received within a specified time. A telephone call may then be necessary.

If no cooperation is received from the customer, the credit clerk prepares a statement for the credit department. When necessary, the clerk may order repossession or service disconnection, or the account may be turned over to a bill collector for personal home visits in an attempt to get payment.

Often, the clerk may receive payments and post the accounts paid to the customer's file. If there are good reasons, an extension of credit may be granted.

JOB CLUSTER #2

"Business and Office"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$175-200/wk	$185/wk	$175/wk

Salaries may vary between private industry and governmental agencies. A local source should be checked for accurate salary information for your area.

HOURS OF WORK

The forty-hour week is standard for most places of employment. Some business firms work Saturday and stay open late one night a week for the convenience of customers. However, in most cases, the credit collection department works on a Monday through Friday basis. Hours are usually 8:00 or 9:00 a.m. to 5:00 p.m.

FRINGE BENEFITS

Depending on the length and place of employment, you may receive:

paid vacations	retirement plan	profit sharing
employee discounts	life insurance	paid overtime
health insurance	illness benefits	

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

United Business Schools Association
1730 M Street, N.W.
Washington, D. C. 20036

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Correspondence clerk (clerical)	209.262-010
Customs entry clerk (gov.ser.)	214.467-010
Forms analyst (clerical)	161.267-018

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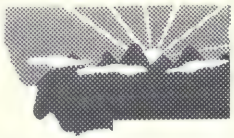

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: COLLEGE INSTRUCTOR

The COLLEGE or UNIVERSITY INSTRUCTOR teaches students in classroom and other settings, conducts and directs research, and participates in other college and university functions.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Academic interests and success	Verbal	Normal health
Preference for working with others	Clerical	Ability to see and hear normally (natural or corrected)
Organization ability		Ability to move about, with or without aids
Orderly habits		Normal use of hands and arms
Ability to communicate		

YOU SHOULD KNOW THAT

College and university faculty members usually enjoy pleasant working conditions, with more than usual amount of free time to pursue personal interests.
Duties in addition to those normally associated with college teaching may require considerable time and effort, e.g. research and public service.
Highly qualified faculty members enjoy considerable mobility, can move from place to place with little difficulty.

YOU MUST BE ABLE TO

Motivate and direct yourself in preparation for entry into the occupational field and in the process of continued education during your career as a college or university instructor.
Express yourself in verbal and written form in above average fashion.
Relate well to and stimulate young adults to learn using techniques of organization of curricular materials and a verbal presentation.

D.O.T. 090.227-010

PREPARATION AND TRAINING:

The college or university faculty member must have a master's (and in most cases, a doctors's) degree to qualify for entry level jobs.

THE COURSE OF STUDY INCLUDES:

High School: A college preparatory major including complete preparation in math, science, and a foreign language is recommended.

College or University: A bachelor's and master's degree in a subject taught at the college level. Subjects vary widely.

ADDITIONAL FACTS ABOUT TRAINING:

In many cases, the student who completes the bachelor's degree will find opportunities for work through assistantships and related on-campus jobs while in graduate school. There are numerous forms of financial help available to graduate students. Colleges and universities offering advanced degrees are found in all areas. However, advanced degrees in some uncommon subject may be offered at very few schools.

SPECIAL ENTRY REQUIREMENTS:

The only standard special entry requirement is a particular level of educational achievement. Levels may be either master's degree, doctor's degree, or a masters's plus some doctorial work. Interviews are usually required, as may be a physical examination.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities are best for qualified individuals in certain of the life sciences.
For those interested in teaching, the opportunities are usually best for those with some secondary school teaching experience.
At present, there is an over-supply of teachers.

ADVANCEMENT

College instructors often begin as instructors, then advance to assistant professor, associate professor, and professor. Attaining the rank of full professor normally requires the completion of a doctor's degree, if not required for entry, and several years experience.
College instructors also advance to jobs in college administration such as assistant dean, dean, vice president, and president of a college or university.

MORE ABOUT THE JOB:

College and university instructors usually teach and advise students in their specialty, perform and direct research activities, and take part in faculty and other college and university business.

The primary job of the faculty member is teaching. Most instructors teach in the classroom or laboratory about twelve hours per week.

In addition to lecturing on the subject taught, the college instructor may quiz students, hold class discussion periods, field trips, give individual help, and use other learning techniques.

Office work consists of helping students individually and in small groups with class and programming problems, preparing and grading tests, preparing grades and such duties.

Most faculty members are expected to perform research and write articles for publication in their field of interest. Much work in the field of research and class preparation is performed in addition to the twelve hours per week spent in the classroom.

Advising student clubs and participating in community relations and other problems also require the attention and time of the college or university instructor.

JOB CLUSTER #13
"Public Services"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
Varies	$850-$2000/mo		

Starting pay may be lower in some small private colleges and higher in some top positions in the larger colleges.

HOURS OF WORK

Nine to twelve hours, Monday through Friday, in the classroom and twenty-five hours or more per week at irregular times in office work, research, meetings, and other tasks are normal for the college or university instructor.

FRINGE BENEFITS

Depending on place and length of employment, you may receive:

retirement plan	sick leave	paid holidays
paid vacations during Christmas & Easter	group life and health insurance	sabbatical leave for travel (with pay)

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LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Montana Education Association
1232 East 6th Avenue
Helena, MT 59601

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

American Association of University Professors
1785 Massachusetts Avenue, N.W.
Washington, D.C. 20036

RELATED OCCUPATIONS:

JOB TITLE:	D.O.T.#:
Instructor, Correspondence School	099.227-014
Teacher	097.227-014
Tutor	099.227-034

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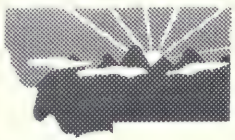

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: COMPOSITOR

COMPOSITORS are printing plant employees who take manuscript copy and set it in type for the presses.

Type may be hand set or machine set.

Compositors are employed in small printing shops, large publishing firms and newspapers.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Patience	Numerical	Full use of arms and hands
Pride in work	Clerical	Manual dexterity
Ability to concentrate		Good general health
Interest in graphic arts		

YOU SHOULD KNOW THAT

- -employers prefer workers with a good background in English and spelling;
- -jobs in the printing field are changing constantly because of technological advances.

YOU MUST BE ABLE TO

- -work under pressure of printing deadlines;
- -stay on your feet for long periods of time;
- -work and concentrate despite the noise of presses and other machinery;
- -work cooperatively with other people.

DOT 973.381-010

PREPARATION AND TRAINING:

High school graduation is the absolute minimum in most plants. Some college training in printing will increase your chances of getting a job.

RECOMMENDED HIGH SCHOOL COURSES

- English
- Spelling
- Basic Math
- Printing
- Graphic Arts
- Journalism
- Drafting

Some employers require an aptitude test before hiring. Most workers learn their skills through apprenticeship programs conducted through the unions.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Job opportunities in the printing field are expected to decline slightly nationwide. This is largely the result of technological advances which cut down the number of people required to do specific jobs: semi-automatic typing machines and photo-offset processes cut down on total employment.
New employees will be required to replace people who move out of the field, advance to better jobs, retire and die. Because of new technology and automation, today's printer must be more skilled.

ADVANCEMENT

Opportunities for advancement are usually union controlled and depend on how much time has been spent on the job.
Apprentices advance to journeymen and journeymen to foremen.
A few printers go on to open their own shops.

MORE ABOUT THE JOB:

The compositor takes hand written or typewritten copy and makes metal or phototype which is used in the printing process.

Some of this is hand-set type for which the compositor takes one metal letter at a time, places it in a composing stick until the complete line or lines of type have been set. These are then placed in a metal frame or chase and placed directly on the press. He or she must follow written instructions regarding size and style of type, and follow layout instructions.

Compositors also use typesetting machines. These are machines with keyboards similar to a typewriter. The operator taps keys and corresponding letters drop into a chamber. When the line of type is complete, the operator lifts the lever and a metal casting is made. The castings then are placed in a chase and put on the press.

Photosetting machines now are being used in offset printing which does not require metal type. These machines produce printed copy on photographic paper.

Compositors in newspapers and magazine publishing houses may take many stories and place them into page frames (chases) so that they all fit. They may have to work with editors when stories do not fit in the proper space. When the pages are complete they are sent to a stereotyper who casts curved metal plates which are then placed on the huge rotary presses used in newspaper plants.

The compositors are also responsible for general maintenance and clean-up of machines and work areas.

JOB CLUSTER #3

"Communication and Media"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
35-40	$8.00-9.00/hr for journey workers		

Union jobs require serving apprenticeship. Check with your local newspaper for salaries in the apprenticeship program.

HOURS OF WORK

The forty-hour week is still the rule, but many printing shops are now on a 37½ or 35-hour week. Working hours are usually 7:00 or 7:30 a.m. to 4:00 p.m. in smaller shops. Newspaper shops may have night shifts. Some publishing firms operate around the clock.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

paid overtime	paid vacation	sick leave
dental insurance	medical insurance	retirement plan
life insurance	profit sharing	double time (Sundays & holidays)

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LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find job
You may contact a youth representative at your local Employment [illegible]

Contact your local newspaper or printing shops for further information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Printing Industries of America, Inc.
5223 River Road
Washington, D. C. 20016

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Make-up arranger	937.381-026
Electrotyper (print & pub.)	974.381-010
Proofsheet corrector	973.381-030
Metal base blocker	974.682-010

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MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: COMPUTER OPERATOR (DATA PROCESSING MACHINE OPERATOR)

The COMPUTER OPERATOR monitors and controls electronic digital computers to process business, scientific, engineering or other data according to operating instructions.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Precision	Numerical	Manual dexterity
Accuracy	Clerical	Hand-eye coordination
Mental Alertness	Spatial	Visual perception
Patience	Mechanical	Good reading comprehension
Adaptability		
Reliability		
Good judgment		
Ability to get along with others		

YOU SHOULD KNOW THAT

-you must have ability and interest in mathematics;
-employment is mostly in metropolitan areas;
-employers insist upon neat, well-groomed appearance.

YOU MUST BE ABLE TO

-think logically and write and speak clearly;
-be extremely attentive to detail;
-sit or stand for long periods of time;
-work under close supervision.

DOT 213.362-010

PREPARATION AND TRAINING:

High school graduation is a minimum. Most employers will not consider employing a computer operator who has not had at least some college training.

RECOMMENDED HIGH SCHOOL SUBJECTS: Algebra, Trigonometry, English, Geometry, Business Machines

COURSE OF STUDY AFTER HIGH SCHOOL: Many computer manufacturers have private schools for training operators to use their machines. This will come after you are hired.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

The use of electronic data processing equipment is expected to continue to increase rapidly throughout the eighties. Many EDP operators will be needed to fill new jobs and to replace those who transfer or have been promoted.
Equipment changes may produce changes in the job requirements. Trainees with experience on the newest equipment are highly desired.

ADVANCEMENT

The computer operator advances through several levels and usually receives pay increases with advancement. Promotion may be to Senior Computer Operator, Lead Computer Operator or Supervisor of Computer Operations.
With additional training, operators may move into more technical phases of programming.

MORE ABOUT THE JOB:

Once the facts and figures to be processed on the computer have been converted into the form used by the computer, the data is ready for the "run". This is the responsibility of the console or computer operator.

The data processing machine operator performs the following:

-examines programmers' instruction sheets;
-determines procedures to follow;
-readies the computer;
-loads the computer with tape or cards;
-starts, operates and monitors the computer;
-manipulates switches;
-observes lights which indicate machine functions;
-may wire plug boards on unit record equipment;
-locates trouble if machine stops.

The data processing machine operator works with:

insurance companies	manufacturing firms	transportation agencies
government agencies	banks, financial	computer service centers
construction	educational agencies	hospitals
public utilities		

JOB CLUSTER #2
"Business and Office"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
36-40	$150-230/wk	$180/wk	$150/wk

Salaries may vary throughout the state. Check a local source for salary information for your area.

HOURS OF WORK
The forty hour week is standard. Some firms have a thirty-five hour week, however. Operators work in shifts that change two or three times a day. Many computer rooms run around the clock. Overtime, Sunday and holiday work is sometimes required.

FRINGE BENEFITS
Depending on length and place of employment, you may receive:

retirement plan	hospital and life insurance	paid vacations and
overtime	sick leave	holidays

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LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs.
You may contact a youth representative at your local Employment Service Office.

Employment Security Division
P. O. Box 1728
Helena, Montana 59601

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Data Processing Management Association
505 Busse Highway
Park Ridge, Illinois 60068

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Computer operator	213.362-010
High speed printer operator	213.382-010
Key-punch operator	203.582-030
Wirephoto operator	239.382-010

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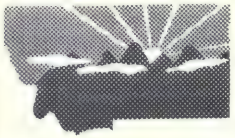

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: COMPUTER PROGRAMMER

COMPUTER PROGRAMMERS, using detailed coding systems, design programs that enable computers to perform specific functions. Programmers may also instruct operators in methods and procedures.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Accurate	Numerical	Manual dexterity
Reliable	Mechanical	Visual acuity
Patient	Clerical	Hand-eye coordination
Persistent		
Imaginative		
Good memory		
Concern for detail		

YOU SHOULD KNOW THAT

- you must have a high ability in mathematics
- employment is chiefly in metropolitan population centers
- being a young occupation, there are many young workers in it
- technical changes in the field may alter training requirements

YOU MUST BE ABLE TO

- sit or stand for long periods of time
- use eyes constantly for long periods of time
- be extremely attentive to detail
- express yourself clearly in writing and speech
- think logically

DOT 020.187-010

PREPARATION AND TRAINING:

The computer programmer is expected to be a high school graduate. They should have a minimum of two years of technical or college training.

RECOMMENDED COURSE OF STUDY:

English	Business Management	Physics
Accounting	Computer Program Languages	Mathematics
Computer Science		Program Writing Techniques
Data Processing		

ADDITIONAL FACTS ABOUT TRAINING:

A high aptitude in logical thinking and reasoning ability is required. Background and training requirements may increase as the field becomes older. A year or more of experience is usually necessary before a programmer can handle most aspects of their job without supervision.

SPECIAL ENTRY REQUIREMENTS:

In organizations which use their computers for scientific and engineering work, most programmers are college graduates in computer science, engineering, mathematics and physical science.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities for programmers will be good during the next ten years.
Men and women will find opportunities for employment in this field.
Most openings in the years ahead will be new jobs that arise as the number of computer installations continue to increase and computers are put to new uses; however, trends towards centralized larger scale computer will limit job opportunities in the future.

ADVANCEMENT

With the data processing industry growing so rapidly, opportunities for advancement for those with good background and experience is especially good. Advancement can be to:

senior programmer	systems analyst
lead programmer	senior analyst
programming manager	

MORE ABOUT THE JOB:

Every problem processed in a computer must first be carefully analyzed so that exact logical steps for its solution can be worked out. In some cases, the preliminary work is done by an experienced programmer. In others it may be done by a specialist known as a systems analyst.

The data processing programmer:

-writes programs supplied by systems analyst for the computer
-prepares instructions for computer and console operators
-writes detailed, coded instructions for computer
-determines data to be processed and sequence of operations
-prepares flow charts and diagrams
-makes mathematical calculations
-"de-bugs" computer by running review sample of data to be processed
-revises program materials and makes a trial run of data on computer
-works as a "team" member when programming highly technical problems
-develops exact definitions of the job to be done
-designs forms to be used to present data
-rewrites computer programs when larger computers are purchased
-documents programs so other programmers can use it when revision is necessary
-operates computer in absence of regular operator

JOB CLUSTER #2

"Business & Office Occupations"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary

Entry positions for programmers in private business were paying about $10,000 per year in the late 1970's. Programmers with several years' experience earned between $16,000 and $20,000 per year, and those with administrative duties earned more than $20,000 a year. A few highly specialized programmers in large industrial firms were earning salaries greater than $25,000 per year.

HOURS OF WORK

Forty hours per week is standard. Most jobs are on the dayshift. Overtime is common, and occasional weekend work may be required. The computer programmer may also be on emergency call basis.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

paid vacations and holidays
sick leave
overtime
health insurance
life insurance

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LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Employment Security Division
Box 1728
Helena, Montana 59601

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Association for Computing Machinery
1133 Avenue of the Americas
New York, NY 10036

American Federation of Information Processing Societies
210 Summit Avenue
Montvale, NJ 07645

RELATED OCCUPATIONS:

JOB TITLE:	D.O.T.#:
Financial Analyst	020.167-014
Programmer, Engineering and Scientific	020.167-022
Programmer, Process Control	020.187-014

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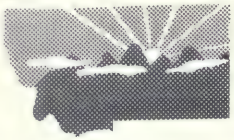

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: CONSTRUCTION-EQUIPMENT MECHANIC

CONSTRUCTION MECHANICS repair, assemble and adjust construction equipment such as internal combustion engines, lighting plants, pumps, air compressors, concrete and mortar mixers, concrete vibrators, generators, pneumatic tools and portable wrenches.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Ability to make own judgment	Average learning ability	Good general health
Accurate	Mechanical	Normal vision and hearing (natural or corrected)
Perseverance	Numerical	Above average physical strength and endurance
Initiative		Normal use of arms, hands, legs and feet
Adaptable		
Able to follow written and verbal instructions		

YOU SHOULD KNOW THAT

-manual and finger dexterity are basic aptitudes for this occupation;
-all construction mechanics are expected to have their own hand tools;
-being in good physical condition is essential;
-you must work in inclement weather.

YOU MUST BE ABLE TO

-use eyes in close work;
-reach for and handle heavy equipment;
-pay attention to details;
-lie in awkward or cramped positions for extended periods;
-tolerate gas, oil, grease and dirt on your hands, arms, face and clothes.

DOT 620.261-022

PREPARATION AND TRAINING:

Many mechanics learn their skills on the job or through apprenticeships. Some acquire their basic training in vocational and technical schools or attend such schools to increase their skills. The Missoula Technical Center offers a course in heavy equipment mechanics.

RECOMMENDED COURSE OF STUDY:

- Mathematics
- Chemistry
- Physics
- Blueprint Reading
- Machine Shop

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Construction equipment mechanics are employed in all parts of the country where high levels of construction, commercial, industrial and farming activities have resulted in the use of great numbers of construction equipment. The opportunities in this field are good for the well-trained mechanic.

ADVANCEMENT

Workers in most maintenance and repair occupations have several avenues of advancement. Some move into supervisory positions such as maintenance manager or service manager.

MORE ABOUT THE JOB:

The construction equipment mechanic:

-maintains, repairs and rebuilds - to conform to factory specifications - construction equipment such as internal combustion engines, lighting plants, pumps, air compressors, concrete vibrators and pneumatic tools;
-operates and inspects machines or equipment to diagnose defects;
-dismantles and reassembles equipment using hoist and hand tools;
-examines parts for damage or excessive wear using micrometers and gauges;
-replaces defective engines and sub-assemblies such as transmissions;
-tests overhauled equipment to insure operating efficiency;
-welds broken parts and structural members;
-directs workers engaged in cleaning parts and assisting with assembly and disassembly of equipment.

JOB CLUSTER #4

"Construction"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	40-48	Under present union contract in some localities, journeymen construction equipment mechanics receive $11.15/hr. The apprentice receives a percentage of this amount. Check a local source for accurate information.		

HOURS OF WORK

The weekly work schedule of equipment mechanics ranges from forty to forty-eight hours a week. Many mechanics work at night or weekends, particularly if they work on equipment used in serving the public.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

paid vacations and holidays
life insurance
health insurance
retirement plan

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LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Check a labor union or construction company for more information on the apprenticeship program.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Independent Garage Owners
of America Incorporated
624 Michigan Avenue
Chicago, Illinois 60605

Amalgamated Transit Union
5025 Wisconsin Avenue, N.W.
Washington, D. C. 20016

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Automobile mechanic	620.261-010
Railroad wheels and axle inspector	622.381-034
Farm equipment mechanic	624.281-010
Airframe & power plant mech.	621.281-014

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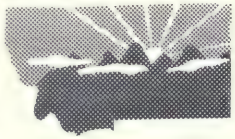

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: CONSTRUCTION WORKER

CONSTRUCTION WORKERS are primarily unskilled laborers who perform a variety of jobs in construction of buildings, highways, dams, pipelines and water and sewer projects.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Reliable	Perform hard physical labor	Good general health
Honest	Work well with others	Physical strength & stamina
Preform routine activities	Follow spoken instructions	Good eye-hand coordination
Can follow orders	Work outdoors in all types of weather	Normal vision and hearing (natural or corrected)
Good work habits		

YOU SHOULD KNOW THAT

-most work is out of doors in all kinds of weather;
-many construction jobs are seasonal;
-you may be required to perform a variety of duties;
-you may be required to join a union.

YOU MUST BE ABLE TO

-lift heavy objects;
-follow verbal orders.

DOT 869.664-014

PREPARATION AND TRAINING:

A high school education is not necessary, but preferred.

RECOMMENDED HIGH SCHOOL SUBJECTS: English, Basic Arithmetic, All kinds of shop courses, Physical Education

On-the-job training is usually available, varying from a few days to a few weeks. Union membership may be required.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

There is a demand for construction workers. Increase in employment may be limited by more widespread use of mechanized equipment. However, construction activity is expected to increase substantially and result in a steady demand for construction workers.

ADVANCEMENT

Opportunities for most construction workers are somewhat limited due to the unskilled nature of their work and the general lack of formal education. Construction workers with public agencies may receive regular pay raises. With most employers, advancement for construction workers depends largely on the initiative and training of the individual. Construction workers expecting to advance should have a high school diploma.

MORE ABOUT THE JOB:

Of great importance in getting and keeping a job as a construction worker is your demonstrated reliability.

Specific duties vary widely from job to job. They may include:

-loading and unloading construction materials;
-stacking and unstacking materials;
-carrying materials, machines and various other types of equipment from place to place;
-tearing down structures;
-clearing and cleaning work sites;
-performing minor repair and maintenance duties;
-driving light trucks and three-wheeled vehicles;
-doing rough painting and cement laying;
-digging ditches;
-pouring and spreading concrete;
-handling and placing forms where concrete is poured;
-shoveling and grading earth;
-setting braces to support the sides of excavations;
-mixing concrete by hand or machine.

Some construction workers, through job experience, are required to handle and use explosives. Construction workers may be required to travel depending on job locations.

JOB CLUSTER #4

"Construction"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$8.76/hr		

Hourly wages may vary throughout the state. Check your labor union or construction company for local information and apprenticeship programs.

HOURS OF WORK

The usual workweek is forty hours. Work is performed during the day time. There may be overtime in an emergency.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

paid vacations and holidays
retirement plans
worker's compensation insurance
medical and life insurance plans

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LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

ADDITIONAL SOURCES OF INFORMATION:

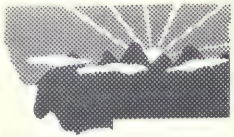
Your school counselor and librarian may also help you find additional information

International Hod Carriers, Building and Common
Laborers' Union of America
905 16th Street, N.W.
Washington, D. C. 20006

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Assembler	869.684-010
Form builder	860.381-046
Highway maintenance worker	899.684-014
Grinding machine operator	690.685-194
Pile driver operator	859.682-018

D.O.T. Fourth Edition, page 868



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: CONTROL ROOM TECHNICIAN (Radio and Television)

CONTROL ROOM TECHNICIANS in the radio and television industry operate and maintain equipment which insures that viewers and listeners see and hear technically good programming on time at all times.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Concern for detail	Finger dexterity	Normal health
Interest in electronics	Ability to work under pressure	Normal hearing and vision (natural or corrected)
Adaptable		
Precise		
Accurate		
Desire to work with machines		

YOU SHOULD KNOW THAT

- -technical training and a First Class Radio Operator License from the Federal Communications System are necessary to become qualified.
- -control room work is physically safe, comfortable work.
- -control room technicians who are well qualified are employed in a growing, dynamic industry.
- -employment with large radio and T.V. stations usually requires some operational experience

YOU MUST BE ABLE TO

- -understand numerous concepts of facts related to communications theory and practices and apply your knowledge daily.
- -perform mental and physical work accurately in conformance with exacting standards.
- -work alone but in close coordination with the efforts of others in a broadcasting team
- -perform well under pressure.

DOT 194.282-010

PREPARATION AND TRAINING:

Control Room Technicians must be high school graduates. You can best and most rapidly qualify by completing a two-year college or technical school course. You may learn the required skills on the job or by the use of correspondence courses.

RECOMMENDED HIGH SCHOOL COURSES:

English	Shop courses of all kinds
Mathematics	Social Studies
Physics	

ADDITIONAL FACTS ABOUT TRAINING:

Important for getting initial employment is your demonstrated interest in communications as shown by participation in a related hobby such as ham radio operation. Good training in numerous aspects of communications theory and practice are available in the Armed Forces. Initial jobs which provide excellent on-the-job type training are most easily found with small radio and television stations and as summer relief helper with larger stations.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities for control room technicians exist with radio and television stations of all sizes located in cities and townsall over Montana.
Opportunities are best for initial employment with the small town stations.
The number of radio and television stations, commercial and educational and other, are increasing rapidly nationwide, creating a greater need for technicians.

ADVANCEMENT

Advancement opportunities depend greatly on individual initiative and the amount of advanced training secured by the technicians.
Those who show the necessary drive may advance to such positions as technical supervisor and to engineer.
Technicians who learn all phases of station technical operation may become technical directors.

MORE ABOUT THE JOB:

Radio and television control room technicians are responsible for maintaining the technical quality of broadcast, and for insuring that programming appears properly for viewing and listening.

Duties vary between working primarily at a control panel to regulate what is broadcast and to working primarily on the maintenance of the technical quality of control room equipment. In smaller stations, you may be required to perform both of these functions. Large stations and networks usually separate these duties.

Those who work primarily at a panel will typically perform the following:

- -receive and study programs scheduled to know when and where programs are to be broadcast
- -learn which lines will carry which programs
- -working at the control panel, push appropriate switches and levers to programs with sound and/or vision from lines to studio
- -terminate transmissions by the use of switches when programs end
- -keep records of where programs originate

Technicians who are responsible for the maintenance of quality of the technical aspects of broadcast perform the following:

- -observes meters, indicators, and cathode-ray oscillographs
- -adjust controls of observed indicators to maintain technical quality of broadcast
- -cleans and maintains electrical and electronic gear including the replacing of working parts as necessary

JOB CLUSTER #3
"Communication & Media"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
35-40	$155-$300/wk	$200-$230/wk	$155/wk

Salaries are usually higher in the major metropolitan areas. Also, competition for jobs is keener.

HOURS OF WORK

The normal workweek is forty hours. Hours may be worked days, nights, and weekends because of the nature of the business which requires constant operation.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

paid vacations	hospitalization plan	group insurance
premium paid for overtime work	retirement plans	sick leave

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs.
You may contact a youth representative at your local Employment Service Office.

Contact your local radio station for further details.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Federal Communications Commission
Washington, D.C. 20554

National Association of Broadcasters
1771 N. Street N.W.
Washington, D.C. 20036

Corporation for Public Broadcasting
1111 16th St. N.W.
Washington, D.C. 20036

RELATED OCCUPATIONS:

JOB TITLE:	D.O.T.#:
Sound Mixer	194.262-018
Video Operator	194.282-010
Sound Controller	194.262-014

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MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: COOKS AND CHEFS

COOKS prepare meals served in restaurants, motels, hotels, hospitals and any of a variety of institutions.

CHEFS are responsible for supervising and overseeing staffs of cooks and kitchen helpers.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits
- Clean
- Responsible
- Concern with detail
- Ability to work with others
- Sound judgment
- Reliable
- Able to adjust to employers' needs

Aptitudes
- Numerical
- Verbal

Physical Abilities
- Good eyesight and hearing (normal or corrected)
- Keen sense of smell
- Keen sense of taste
- Good health
- Full use of arms, hands and legs
- Able to work fast and under pressure

YOU SHOULD KNOW THAT

- -you must be able to meet the health requirements of the city or county in which you work;
- -scrupulous attention to cleanliness, both personal and on the job is essential;
- -you may need to join a labor union for some jobs.

YOU MUST BE ABLE TO

- -stand and walk about for most of the working day;
- -stoop, reach, lift kitchen equipment and supplies;
- -in some cases, instruct and supervise others;
- -read, write and follow spoken or written instructions;
- -in some cases, keep records and inventories and order supplies;
- -follow directions carefully.

DOT 313.131-014

PREPARATION AND TRAINING:

No formal requirements for becoming a cook have been uniformly established.

Some individuals learn on the job. However, large establishments and the better restaurants are giving increasing preference to individuals with formal training. Most training programs are two years in length. The Billings and Missoula Vocational-Technical Centers offer a course in food preparation and services.

RECOMMENDED HIGH SCHOOL COURSES: Business Math, Biology, English, waiter/waitress, maid, hostess or cashier courses, if available)

ADDITIONAL FACTS ABOUT TRAINING

Private restaurant and hotel management schools charge up to $650 for their courses. Training in business management is necessary for those who expect to work in large restaurants and institutions.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

100,000 jobs each year for the next ten years. (This is a national figure.) Entry level cooking jobs can be filled by anyone of average intelligence. The real shortage is developing at the chef level.

ADVANCEMENT

Advancement in a small restaurant or institution or in a speciality spot (taco stand, chicken dinner or steak house) or for the individual who works in a large kitchen, is dependent upon that person's ability to adjust and progress through their experience and the application of the skills they have learned.

MORE ABOUT THE JOB:

In a small establishment employing one cook, the cook does all the food preparation, cooking, ordering, menu planning and cleaning up.

A cook who has a helper and a dishwasher to assist him/her concentrates on food preparation.

In the largest, most complex of kitchens, the cook does not handle his/her own ordering or menu planning, but carries out the orders of the executive chef.

By the time a cook becomes a chef, he/she may do no cooking of any type at all, but be fully occupied by executive duties - planning menus, ordering supplies, hiring and supervising subordinates.

The executive chef of a restaurant chain or institutional operation may travel from one establishment to another in the chain instructing the resident chef and checking operations to see that standards of quality, service, portion control, food cost and cleanliness are maintained.

Institutional cooks often work under the supervision of a dietitian whose concern is that the inhabitants of the institutions get a well-rounded, balanced diet. They may handle special diets for individuals with nutritional problems.

JOB CLUSTER #13

"Personal Services"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40			

Head cooks or executive chefs usually earn the highest pay. Chefs generally earn from $18,000 to $25,000 or more in well known eating establishments.

Because of the varying rates of pay throughout Montana, specific information on salaries may be obtained at your nearby employment office.

HOURS OF WORK

The hours of work vary with duties and type of place in which the individual works. Most jobs have a forty-hour workweek. Fry cooks work all shifts. You have to work some nights, weekends and holidays.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

paid vacations	retirement plan	free or low-cost meals
paid holidays	medical insurance	uniform laundry

VV10579

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Contact the Missoula or Billings Vocational-Technical Centers.
Check at a local restaurant of the type you would be interested in (large or small).

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

American Culinary Federation
P. O. Box 53
Hyde Park, New York 12538

Educational Director
National Institute for the Food Service Industry
120 South Riverside Plaza
Chicago, Illinois 60606

American School Food Services Association
4101 East Illiff Avenue
Denver, Colorado 80222

The Educational Institute
American Hotel and Motel Association
1407 S. Harrison Road
Michigan State University
East Lansing, Michigan 48823

The Council on Hotel, Restaurant and Institutional Education
1522 K Street, N.W.
Washington, D.C. 20005

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Baker	313.381-010
Butcher	316.681--10
Carver (hotels and rest.)	316.661-010
Head waiter or waitress	311.137-022
Food service supervisor	319.137-010

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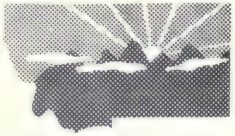

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: COPYWRITER

COPYWRITERS are professional writers who use the written word to convey advertising and informational messages to audiences of newspapers, magazines, radio, television and other media. Their objectives are to promote sales of goods and services and public acceptance of sponsors' products.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Curious	Verbal	Good health
Interest in people	Visual imagination	Good sense of color
Initiative	Hold up under pressure	Pleasing appearance
Creative	Solve problems	
Drive		
Sense of humor		

YOU SHOULD KNOW THAT

-crisis and pressures are common.
-success is measured by satisfaction of the customer, so production counts.
-you will be ill-advised to enter the field unless you have a gift for writing.

YOU MUST BE ABLE TO

-accept criticism and gain important points with tact.
-enjoy problem solving situations.
-write and speak fluently.
-be flexible, versatile and adapt readily to many situations.
-communicate well with writing.

D.O.T. 131.067-014

PREPARATION AND TRAINING:

The copywriter should have a high school diploma and would find background in journalism, writing, art, photography, school newspaper, and yearbook helpful. The course of study includes:

General Information:
Summer experience in retailing, selling, or door-to-door canvassing provides valuable backgrougd in meeting and learning to overcome sales resistance
Formal Education and/or Training
In high school courses in journalism, writing, art, photography and sales experience are helpful
Work on the school newspaper and yearbook is very beneficial
In college the following course should be taken:
Journalism
Reporting
Editing
Photography
Art-Layout
Newspaper and Magazine
Selling
Production
Accounting

JOB CLUSTER #3
"Communication & Media"

PROSPECTS AND OPPORTUNITIES:

JOB TRENDS

There is not a great demand for copywriters in this state.
Opportunities are good if a person has unusual talent and demonstrates it.
Local opportunities exist primarily with newspapers, radio stations, and some retail stores.

ADVANCEMENT

Advancement may be from beginner to copywriter, copy chief, or head of advertising department.
Promotions are based almost entirely upon ability and sucess.

MORE ABOUT THE JOB:

The job of the Copywriter is primarily to conceive ideas and to write effective copy to create the wildest possible buyer acceptance for goods and services.
In a small operation may double in many capacities, including client contact, selling, advertising copy, keeping records of accounts, as well as preparation of actual advert
Effective writing alone is not enough for the Copywriter; this person must have a thorough knowledge of the product or service being sold
The Copywriter may be called upon to write annual reports, sales brochures, point-of purchase materials, instruction manuals and press release
Might do work for outdoor posters, mail order, direct mail or industrail advertising
May develop a flair for specialized promotions, such as fashions, home furnishings or industrial and scientific products
In any field a person must thoroughly know the competition, much research is required of the Copywriter
Advertising agencies provide better working conditions and also involve higher risk with higher rewards
Work in a retail business is subject to pressure of deadlines, with last minute revision
Sometimes requiring late meetings, working evenings and weekends.

JOB CLUSTER #3

"Communications & Media"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$200-$300/wk	$240/wk	$200/wk

Salaries vary throughout the state. Check a local source for accurate salary information for your area.

Top copywriters for large agencies may earn more. Individual talent counts heavily in upper salary ranges.

HOURS OF WORK

Forty hours is a normal workweek. Overtime is common with advertising agencies

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

paid holidays
retirement plan
paid vacations
health and accident insurance

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Check with your local newspaper for further information

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Advertising Federation of America
1225 Connecticut Ave. NW
Washington, D.C. 20036

American Association of Advertising Agencies
200 Park Avenue
New York, NY 10017

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Editorial writer	131.067-022
Crossword puzzle maker	139.087-010
Critic (printing and publishing)	131.067-018
Playwright	131.067-038

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: COSMETICS DEMONSTRATOR (D.O.T. DEMONSTRATOR)

The COSMETICS DEMONSTRATOR works in a store or shop or is self-employed and must have a complete working knowledge of the line or lines of cosmetics represented.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Poise	Sales ability	Good grooming
Enthusiasm	Originality	Personal cleanliness
Aggressiveness	Verbal	Good eyesight and hearing (natural or corrected)
Diplomacy		Use of hands and fingers
Tact		
Genuine interest for each customer		

YOU SHOULD KNOW THAT

- -some cosmetics demonstrators work in a store or shop and others are self-employed demonstrators representing a particular line of cosmetics;
- -cosmetics demonstrators may not apply beauty preparations directly on a customer's skin unless they are a licensed cosmetologist.

YOU MUST BE ABLE TO

- -tell at a glance if a customer needs their eyes played up or if a large nose should be understated through use of cosmetics;
- -use poise and good vocabulary while demonstrating the cosmetics;
- -project enthusiasm for each customer whom you are assisting;
- -mix and blend powders and creams (depending on the type of cosmetics sold).

DOT 297.354-010

PREPARATION AND TRAINING:

A high school diploma is necessary to enter the field of cosmetics demonstration.

Most companies furnish employees with training programs; if the demonstrator rises to a district or regional managership, she/he may be offered additional schooling in cosmetology.

Stores and shops assign supervisors to train new employees.

The cosmetics industry is carefully policed by the Food and Drug Administration of the United States Health, Education and Welfare Department. Successful cosmetics demonstrators must be trained to be aware of every ingredient contained in each product sold in order to protect the public and their own career.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities should increase with growing population and greater stress on health and beauty aids.
Increased opportunities have also occurred due to the recent trend of men becoming more fashion conscious.

ADVANCEMENT

Advancement may be to a district or regional managership.

MORE ABOUT THE JOB:

Many independent demonstrators work part-time.

There is a profit in the cosmetics field.

You should be a licensed cosmetologist.

The cosmetic demonstrator must be able to determine a customer's skin type in terms of dry, oily or normal complexion. The demonstrator may then suggest a cleansing treatment which prepares the skin and pores for makeup application.

The demonstrator usually follows the company's explicit directions for demonstration, but must have a thorough knowledge of the makeup to accommodate customers' coloring or other preferences. The demonstrator may be called on to blend or mix cosmetic ingredients and must keep up with current trends in beauty techniques.

In most cases, the cosmetics demonstrator is responsible for selling hair rinses, bleaches and permanent dyes. A cosmetologist's license is necessary in order to apply hair coloring.

JOB CLUSTER #12

"Marketing and Distribution"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40-48	$130-150/wk	$135/wk	$130/wk

Salaries may vary throughout the state. You may wish to check a local source for accurate salary information for your area.

HOURS OF WORK

You will keep regular business hours in the store or shop. You may have to work on Saturday. The independent demonstrator's hours are irregular.

FRINGE BENEFITS

Depending on length and place of employment, you may receive the following:

prize programs for sales
traveling expenses
retirement plan
paid vacations and holidays

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LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Talk to a cosmetic demonstrator in a local department store or to an independent representative.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Rayette Fabrege Reports
261 East 5th Street
St. Paul, MN 55101

Sea Breeze Laboratories
P. O. Box 7195
Pittsburgh, PA 15213

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Sales clerk	290.477-014
Demonstrator, knitting	297.354-014
Demonstrator, sewing tech.	297.454-010
Goodwill ambassador	293.357-018
Solicitor	291.357-010
Makeup artist	333.071-010

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: COSMETOLOGIST

A COSMOTOLOGIST (beauty operator and beautician) shampoos, sets and styles hair according to the patrons' desires; and bone structure of head. They may aid a customer by suggesting various hair styles, hair colors, types of permanents and use of make-up and manicures.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Pleasant	Learn and apply techniques of cosmetology and barbering	Good color perception
Friendly	Use imagination	Stamina
Creative	Work well with others	Non-allergenic skin
Well groomed	Finger dexterity	Eye-hand coordination
Congenial		Normal or corrected vision and hearing
Patient		Joint mobility

YOU SHOULD KNOW THAT

-jobs are most frequently obtained by personal application
-all states require an examination for a state license
-may have to provide some of your own equipment
-after graduation from Beauty School, you take the State Boards, and are issued a license
-you must work under a manager operator for at least one year before becoming a manager-operator.

YOU MUST BE ABLE TO

-relate to people at all levels
-stand for long periods of time
-stoop and bend
-tolerate odors, chemical solutions, dyes and tints
-have a creative flair for originating or adapting styles to suit individual customers.

DOT 332.271-010

PREPARATION AND TRAINING:

You must have completed at least the eighth grade, but high school education is desirable.

You can find training in numerous beauty colleges around the state. Northern Montana College at Havre offers a course in cosmetology. You must train for 2000 hours before taking the state board examination in the State of Montana.

The beauty course of study includes:

Manicuring	Bleaching & tinting	Shop management
Facial care	Permanent wave	Salesmanship
*Day make-up	Shampooing	Servicing hair pieces
*Evening make-up	Care of skin and scalp	Personal analysis
*Men's haircutting and styling	Hair cutting	Hair relaxing

*Additional training may be needed in these areas unless the operator has a natural talent.

PROSPECTS AND OPPORTUNITIES:

JOB AVAILABILITY TRENDS

Opportunities are very good for employment.
Because many operators drop out of the labor market after a year or two of employment.
Prospects for replacement for those workers will be good

ADVANCEMENT

Opportunities for advancement include such jobs as manager, supervisor, wig specialist, electrologist, or owner of a private shop.

MORE ABOUT THE JOB:

Specific duties of the cosmotologist might include:

-cut or trim hair
-shampoo, set and comb-out hair
-give permanent waves
-bleach or color hair.
-style wigs
-give manicures
-suggest hair styles
-straighten hair
-take appointments
-clean equipment
-order new supplies
-apply make-up
-know various hair, scalp and skin diseases
-know the anatomy of the hair and skin

JOB CLUSTER #13

"Personal Services"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$104-$195/wk		$104 plus a commission (usually 60%)

Some beauty shops pay only by commission, and others pay a straight salary. Because of the varying rates of pay throughout Montana, specific information on salaries may be obtained at your nearby employment office.

HOURS OF WORK

The beauty operator works forty hours per week or more. This may include late afternoon, evening, and Saturday work. There are many part-time hairdressing jobs available.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

-medical and life insurance
- paid vacations and holidays
-commission in addition to base salary

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs.
You may contact a youth representative at your local Employment Service Office

Talk to beauty operator in a local beauty shop, or to an instructor in a beauty school.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

National Association of Cosmetology Schools, Inc.
599 So. Livinston Ave.
Livingston, New Jersey 07039

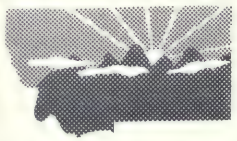
National Hairdressers and Cosmetologists Association
3510 Olive Street
St. Louis, Missouri 63103

Montana Cosmetology Examining Board
Lalonde Building
Helena, Montana 59601

RELATED OCCUPATIONS:

JOB TITLE:	D.O.T.#
Hair stylist	322.271-018
Makeup person (amuse. & rec.; motion picture)	333.071-010
Barber	330.371-010

D.O.T. Fourth Edition, page 233



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB:

COUNTER ATTENDANTS (Cleaning and Laundry)
(D.O.T. SERVICE ESTABLISHMENT ATTENDANT)

COUNTER ATTENDANTS in drycleaning and laundry establishments receive and return clothing and other items from customers and perform additional services.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Even temperament	Verbal	Normally good general health
Attention to detail		Average eyesight and hearing (natural or corrected
Pleasant voice and manner		Normal use of hands, arms, legs and feet
Pleasant appearance		
Initiative		
Desire to meet and serve others		

YOU SHOULD KNOW THAT

-you may have to perform clerical and other chores in addition to waiting on customers;
-most cleaning and laundry establishments, particularly newer ones, are pleasant, well-lighted places in which to work;
-some attendants may find part-time and seasonal work before they are eighteen years of age.

YOU MUST BE ABLE TO

-talk easily and in a pleasant fashion with customers of all types;
-move about on your feet regularly during the day;
-lift and carry light bundles of clothes and other items;
-perform basic arithmetic calculations quickly and accurately;
-answer questions and do other business over the telephone.

D O T 369.477-014

PREPARATION AND TRAINING:

There are no specific educational requirements for counter attendants. However, some employers will not hire counter attendants without a high school education.

Counter attendants are given on-the-job training, which may include such things as techniques of wrapping, bundling and sorting items as well as how to prepare bills. Training is brief.

Typing, bookkeeping and billing skills are extremely valuable and can insure job stability for the counter attendant. Knowledge of fabrics and their proper care is valuable information. The successful worker should have some persuasive ability for promoting the various services of the cleaning and/or laundry establishments.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities exist all over the state.
The demand for people who can perform clerical tasks efficiently in addition to waiting on customers is greatly due to the growth of dry cleaners in shopping centers, the competitive nature of the dry cleaning business and the population growth.

ADVANCEMENT

Opportunities for advancement are few and the attendant may serve in the same position for years without advancing.
In large dry cleaners with many employees, the extremely well qualified and ambitious worker may advance to a position in management.

MORE ABOUT THE JOB:

The primary duty of the dry cleaning and laundry counter attendant is to meet and serve customers in a cleaning establishment. Because the counter attendant meets the public, their function contributes much to the successful operation of the business. Either favorable or unfavorable impressions are made on the customer through this contact.

Basic duties of the counter attendant include:

-meeting customers and accepting clothing and other items which need cleaning and laundering;
-filling out tickets which include the customer's name, address, instructions and a description of the clothes left;
-giving customers a copy of the ticket;
-finding and returning finished clothes to customers;
-taking money from customers for payment, ringing up sales and making change;
-helping customers with cleaning problems by making suggestions and suggesting the uses of services such as dying, reweaving and blocking.

When not engaged in the primary duties of the job, the counter attendant may

-perform marking duties which include examining garments for defects such as holes, stains, tears, rips, loose buttons and others;
-perform some repair work using sewing machines, needles, thread and other sewing tools and materials;
-do clerical work such as typing, simple bookkeeping, filing and other tasks.

JOB CLUSTER #13

"Personal Services"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$120-150/wk	$130/wk	$120/wk

Salaries may vary throughout the state and from union to non-union shop. You may wish to check a local source for salaries in your area.

HOURS OF WORK

The normal workweek is forty hours. Four hours overtime for Saturday work is common. Most workers perform during the day Monday through Friday.

FRINGE BENEFITS

Depending on place and length of employment, you may receive the following:

pension plan	paid vacations and holidays
health plan	discount privileges

VV10579

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Contact a local cleaner for further details.

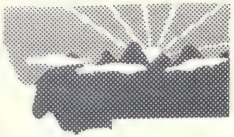
ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Laundry and Cleaners Allied Trade Association
1180 Raymond Boulevard
Newark, New Jersey 07102

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Receiving clerk	222.387-050
Coupon redemption clerk	290.477-010
Sales clerk	290.477-014



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: COURT REPORTER

A COURT REPORTER records, by hand or machine, every word spoken in a court room. The reporter is also responsible for transcribing the notes for the court's permanent record. Court reporters work in local, state and federal courts. They may also work in a number of government agencies and boards or in a grand jury. Some may even work as free-lance reporters for individual businesses.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Responsible and alert	Verbal	Excellent hearing
Emotionally stable	Mental alertness	Good eyesight
Patient	Above average intelligence	Full use of hands & arms
Speak fluently	Ability to work under pressure	Finger dexterity
Good moral character	Command of the language & spelling	Eye-hand coordination
		Good speech

YOU SHOULD KNOW THAT

-you must be a high school graduate;
-you must be of good moral character (no felony offenses).

YOU MUST BE ABLE TO

-use steno-type machine at a high rate of speed;
-understand technical jargon, different accents, poor diction and other peculiarities;
-concentrate for long periods of time under trying conditions;
-develop a large vocabulary and command of grammar and spelling;
-sit for long periods of time.

DOT 202.362-010

PREPARATION AND TRAINING:

The court reporter must have at least a high school diploma.

The court reporter would find course work in typing, shorthand, office machines, other commercial subjects, as well as a well-rounded program in liberal arts helpful. A business college or college background is considered valuable to improve professional skills and extend the background as needed to develop vocabulary and acquaintance with many facets of life as may be encountered in court hearings.

Work experience recording proceedings of conferences and other meetings would be of value.

COURSE OF STUDY SHOULD INCLUDE:

Typing		Shorthand (manual and/or (machine
Business Mathematics		English Essentials
Business Writing		Liberal Arts
Business Machines		

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

As the competition in this field is high, getting a job is difficult. The opportunity is best in the cities.

ADVANCEMENT

Advancement opportunities are fair. The court reporter may be advanced to a higher court or may open one's own business.

MORE ABOUT THE JOB:

The court reporter is responsible for collecting and preserving all statements, depositions and actions that take place in a court of law during an investigation or hearing conducted by an agency of the municipal, state or federal government.

Most reporters today use the Steno-Type machine which enables them to record up to 200 words per minute.

Many courts of law require their court reporter to be a Certified Shorthand Reporter (CSR).

Reporters may work in a number of areas: civil, domestic, criminal courts of law for a municipality, the state or federal government, grand jury, hearings by various government agencies, commissioners and boards.

Some may choose to work independently as free-lance reporters. These people do piece work being paid on the basis of the number of documents needed and prepared for clients.

JOB CLUSTER #2

"Business and Office"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40-48	$800-1,100/mo	$950-1,050/mo	$800/mo

This salary range is based on district court information; however, may vary in different localities. The salary for federal court reporters is higher.

HOURS OF WORK

The forty-hour workweek is normal for the official reporter of a court. He/she may work overtime to prepare transcription of the day's session. Free-lance work on an independent basis may require more than the normal forty-hour week.

FRINGE BENEFITS

Depending on length and place of employment, you may receive: pension plan, paid vacations, sick leave, health benefits.

"Free-lance" reporters receive no established fringe benefits. Instead, they take a higher risk in hopes of higher reward.

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office.

It is recommended that aspirants contact the members of the judicial department in their area for more complete information on entrance requirements.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

U.S. Civil Service Commission
Washington, D.C. 20415

United Business Schools Association
1730 M Street, N.W.
Washington, D. C. 20036

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Stenographer (clerical)	202.362-014
Stenographer (print. & publ)	202.362-018
Stenotype operator	202.362-022
Correspondence review clerk	209.367-018

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MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: CREDIT ANALYST

CREDIT ANALYSTS may work for a bank, savings and loan association, or other major money lenders. They may work for an industry which may wish to investigate the financial condition of major contract purchasers.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Keeps information confidential	Numerical	Average health
Enjoys mathematics	Verbal	Average vision (natural or corrected)
Dependable	Clerical	
Works precisely	Writing	
Works with people		

YOU SHOULD KNOW THAT

-while college graduates are preferred, there are opportunities for those with less than a four-year degree;
-you may be expected to participate in conferences with loan officers and customers, and must be able to communicate clearly and precisely;
-you should have a strong background in math and accounting.

YOU MUST BE ABLE TO

-investigate business background of prospective borrowers and make accurate analysis of a business financial condition;
-keep active credit files on major borrowers to determine current financial status;
-prepare detailed reports with statistical documentation for use by commercial loan officers or loan committees.

DOT 191.267-014

PREPARATION AND TRAINING:

High school graduation is an absolute minimum. Most employers prefer those with at least two years of college and in some cases, a four-year degree is required. The high school graduate will usually work for several years in other jobs before becoming an analyst.

RECOMMENDED HIGH SCHOOL SUBJECTS:
Math
Bookkeeping
Report Writing
Business Machines
English
Typing
Machine Calculation
Speech
Social Studies

Generally, a college preparatory major with emphasis in business and math is recommended.

COURSE OF STUDY AFTER HIGH SCHOOL:
Statistics
Supervisory Training
Bookkeeping
Accounting
Economics
English
Report Writing
Machine Calculation
Speech
Mathematics

SPECIAL ENTRY REQUIREMENTS:

Unless you have a college diploma, you may be expected to serve an apprenticeship period as a credit inquiry clerk, or installment loan specialist, or in some other position while learning the fundamentals of credit analysis.

Many banks require American Institute of Banking courses in accounting for the non-college graduate.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Chances for immediate employment are rather slight. However, in most instances, one may become a junior analyst in two to four years if job capability is shown. This advancement is achieved through a training program. The opportunity is greatest in the large cities. Increases in the use of credit probably aid the demand for analysts. Computers are doing much of the "book work", but analysts must still review the figures.

ADVANCEMENT

Junior analysts may become senior analysts after lengthy training programs. Senior analysts may move into executive-level positions. Yearly increases are made in salaries of satisfactory credit analysts.

MORE ABOUT THE JOB:

The Credit Analyst determines whether a person or firm should be granted credit on the basis of past and present credit dealings and prospects for future ability to pay.

The analyst may:

-investigate history of people or businesses seeking credit;
-maintain active credit files concerning major borrowers;
-determine financial conditions of borrower through a thorough examination of their business background;
-analyze financial data of all types;
-prepare financial reports on the customer's credit standing;
-maintain statistical records and files;
-recommend, in accordance with findings, whether or not to grant credit;
-be familiar with credit laws;
-train junior analysts;
-keep all information confidential.

Senior analysts assist with training junior analysts and are responsible for the overall performance of their staff. The senior analyst usually handles the more complex accounts personally.

JOB CLUSTER #2

"Business and Office"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$725-1,500/mo	$950/mo	$725/mo

Starting salary depends greatly on training. A college accounting graduate will make a much higher starting salary than an employee with only a year or two of training.

Because of varying rates of pay throughout Montana, specific information on salaries may be obtained at your nearby employment office.

HOURS OF WORK

The standard workweek is forty hours. Normal hours are 8:00 or 9:00 a.m. to 4:30 or 5:30 p.m. There may be some extra hours put in during periods of heavy work load or for special projects.

FRINGE BENEFITS

Depending on the length and place of employment, you may receive:

paid vacations and holidays	health insurance	sick leave
bonus or profit sharing plans	retirement plan	

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Check a local bank or local credit union for further information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Credit Research Foundation
3000 Marcus Avenue
Lake Success, New York 11040

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Title examiner	119.287.010
Insurance clerk	219.362-034
Credit cashier	211.462-010
Bank president	186.117-054
Bank teller	211.362-018

D.O.T. Fourth Edition, page 140

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: CREDIT CLERK

CREDIT CLERKS interview applicants for loans and credit, process applications and verify credit references and information. Credit clerks usually notify customers of acceptance or rejection of their applications.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Well groomed	Verbal	Good general health
Courteous	Numerical	
Tactful	Clerical	
Good judgment		
Pleasant speaking voice		

YOU SHOULD KNOW THAT

-your history should show stability, potential for advancement and be able to stand a reference check;
-you must have a liking for public contact work.

YOU MUST BE ABLE TO

-type well and do other general secretarial duties;
-communicate effectively with all types of people;
-create a good impression;
-pay attention to details in reviewing records;
-speak well;
-write legibly.

DOT 205.367-022

PREPARATION AND TRAINING:

High school graduation is generally required. Some college or business training is preferred in most places of employment.

RECOMMENDED HIGH SCHOOL SUBJECTS:	Filing	Communication Skills
Business Math	Typing	Business English
Business Machines	Bookkeeping	
COURSE OF STUDY AFTER HIGH SCHOOL:	Business Math	Machine Calculation
Advanced Typing	Business English	Records Management
Accounting	Office Practices	Speech
Human Relations in Business	Business Correspondence	

ADDITIONAL FACTS ABOUT TRAINING:

Additional training in general secretarial courses or related job experience will improve efficiency and chances for advancement to higher paying jobs.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Employment in clerical occupations is expected to continue to rise during the 1980s.
Many new positions in clerical and related occupations will be added each year.
Credit clerks and people responsible for collecting bills will not be affected too much by automation and so openings will remain at least steady.
Employment is usually in banks, credit unions, large department stores and loan companies.
Credit clerks work in cities of all sizes; however, more job openings are in the larger metropolitan areas.

ADVANCEMENT

Opportunities for advancement depend largely on the experience and training a worker has, but jobs in other clerical areas are available. Credit clerks who show efficiency in their jobs and the desire to advance may become credit correspondents.

MORE ABOUT THE JOB:

Credit clerks may do all or some of the following, depending on the place of employment:

-interview applicants for credit or loans and explain various payment plans;
-help applicants fill out forms and check for completeness and accuracy;
-verify customer's assets, references and credit record;
-telephone or mail a letter to applicant to inform them of acceptance or rejection of application;
-prepare sales contract forms, explain contract and obtain customer's signature;
-file and record credit transactions and payment;
-send brochures and letters to prospective customers;
-adjust incorrect credit charges and grant extensions of credit on overdue accounts;
-may take application to credit manager for approval;
-may assist counter clerk;
-general office work such as filing and computing interest and payments may be done by the credit clerk.

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
35-40	$130-180/wk	$160/wk	$130/wk

Salaries will vary throughout the state. Check a local source for salary information in your area.

HOURS OF WORK

The forty-hour workweek is standard. Hours are likely to be 8:00 or 9:00 a.m. to 5:00 p.m.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

paid vacation and holidays	profit sharing	employee discount
retirement plan	health insurance	overtime
life insurance	illness benefits	

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LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Talk to the credit clerk or personnel director at a local bank or department store.

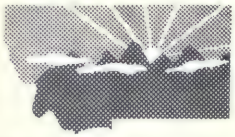
ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Claims clerk (insurance)	205.367-018
Library assistant (library)	249.367-046
Order clerk (clerical)	249.367-054
Collection clerk (clerical)	241.357-010

D.O.T. Fourth Edition, page 157



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: CREDIT MANAGER

CREDIT MANAGERS are responsible for making decisions regarding the extension of credit to customers and patrons of all kinds of businesses. They may also oversee account collections.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Tactful	Verbal	Good hearing and vision (normal or corrected)
Courteous	Numerical	Sufficient mobility to perform office work
Patient	Clerical	
Sympathetic		
Mature judgement		
Integrity		

YOU SHOULD KNOW THAT

- you won't qualify if: you have a police record, for other than traffic violations; you do not meet acceptable standards of grooming and appearance; or if you have a poor personal financial record.

YOU MUST BE ABLE TO

- work accurately and precisely and be thorough in every detail.
- use independent judgement in planning work and selecting tools.
- do ordinary arithmetic calculations.
- read blueprints or diagrams.

DOT 186.167-022

PREPARATION AND TRAINING:

The Credit Manager must be a high school graduate, preferably with commercial training. Post high school business training is desirable. If you hope for advancement at top level jobs, a bachelor or business administration degree is an asset.

COURSE OF STUDY INCLUDES:

English	Business Mathematics	Economics
Personal Use Typing	Accounting	Business Law
Business Writing	Cost Accounting	Machine Calculation

ADDITIONAL FACTS ABOUT TRAINING:

Some maturity and experience (usually at least two years) in credit and collection work are required for the job of credit manager. Often the job is filled by promotion of a collection clerk or outside collector.

SPECIAL ENTRY REQUIREMENTS:

Tact is essential in this work. You will be interviewing people in distress about a subject always painful--their bills and how they expect to pay them. You must be able to adhere to the credit policy designed to protect the employing agency regardless of the amount of sympathy you may feel for the needy. It is not easy to refuse an applicant.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Credit agencies and credit departments of large businesses are found in all cities.

Serious shortages rarely exist for beginners in credit work. However, regular openings occur and those with the proper educational background find jobs with little difficulty.

ADVANCEMENT

Credit managers who gain additional education and experience advance to such jobs as comptroller and treasurer or to manager jobs with large companies.

Credit managers with sufficient financial resources may start their own businesses in credit and collections.

MORE ABOUT THE JOB:

Credit and collection managers may deal in commercial credit where the customers will be other businesses, or their job may be in consumer credit where they extend credit to individuals. In directing the activities of either a commercial or a consumer credit department, the manager's basic responsibility is to see that wise decisions are made in extending credit to the firm's customers. Although the jobs are similar, differences exist in the jobs of commercial and consumer credit managers.

In commercial credit, the credit manager usually works for a manufacturing establishment, a jobber, or a wholesale firm. The job of the loan officer in the commercial loan department of a bank is closely allied to that of the commercial credit manager. The credit manager in the consumer credit field generally is employed by a retail store

Commercial credit managers extend credit to other companies which involve thousands or even hundreds of thousands of dollars. They therefore must make careful studies of each customer's account before making a decision.

In consumer credit, the credit manager administers the department responsible for approval or disapproval of requests to buy the company merchandise on credit. Information provided on a customer's credit application is checked routinely to determine past performance in paying bills.

JOB CLUSTER #2

"Business and Office"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$12,500-16,000/yr	$14,500/yr	$12,500/yr

Because of varying salaries throughout the state, check a local source for accurate information.

HOURS OF WORK

The forty-hour workweek is usual. You may have to work evenings or weekends.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

- paid vacation and holiday
- health insurance
- Social Security
- retirement benefits

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Check your local credit bureau or credit department of a large department store.

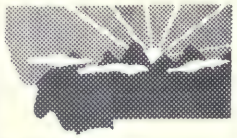
ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

American Bankers Association, Personnel,
Administration, & Management Development Committee
90 Park Avenue
New York, NY 10016

RELATED OCCUPATIONS:

JOB TITLE:	D.O.T.#:
Manager, Insurance Office	186.167-034
Reserve Officer	186.167-054
Bonding Agent	186.267-010



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: CUSTODIAN

CUSTODIANS and JANITORS are responsible for keeping buildings clean, sanitary, and orderly and for keeping heating and cooling systems operating correctly.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Honest	Mechanical	Good health
Friendly	Numerical	Normal vision (natural or corrected)
Self starting		Normal use of hands and arms
Likes working alone		Freedom from back ailments
Personal responsibility		Able to lift at least 50 lbs
Likes routine tasks		

YOU SHOULD KNOW THAT

-although the custodian's work day is spent following a routine schedule, there can be considerable variety in the tasks performed; unexpected and emergency situations can reduce the routine aspects of the job.
-most custodian jobs require strenuous physical activity.

YOU MUST BE ABLE TO

-work by yourself without close supervision.
-adapt to work which usually involves routine tasks and allows little variety or room for change.
-work evenings and nights for many custodian jobs.

D O T 382.664-010

PREPARATION AND TRAINING:

The custodian needs at least an elementary school education and possibly a high school diploma. For better paying jobs with employers such as Civil Service, a high school education or its equivalent is strongly recommended. Beginning custodians receive on-the-job training.

THE COURSE OF STUDY INCLUDES:

High School: English and arithmetic are recommended. Shop courses of all kinds are also valuable training for developing manual and mechanical skills.

On-the-job Training: may last several weeks and include such things as the proper use of hand and power equipment, detergents and other cleaning agents, and the proper use of waxes.

ADDITIONAL FACTS ABOUT TRAINING:

Many custodian jobs are held by college students on a part-time basis. Many employers will prefer older, retired workers for permanent custodian positions. Some mechanical skills are necessary for most custodians because of the need to operate and make minor repairs on power and hand tools regularly used.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities for custodians exist throughout the state.
Most custodians are employed in schools, office buildings, and apartments.
Employment opportunities for custodians are increasing slowly.

ADVANCEMENT

Few opportunities to advance exist for custodians since many may work in one building requiring supervision from only one supervisor.
Custodians, especially those with public agencies, receive regular pay raises, and with seniority, preferred work assignments.
In school systems and other such institutions, a custodian may become a head custodian.
In office buildings and large apartments, they may become supervisors and superintendents.

MORE ABOUT THE JOB:

Among standard duties that custodian might be expected to perform are the following:

sweeping offices, hallways, and working areas;
mopping various surfaces;
dusting;
waxing floors;
opening and closing assigned areas at specified times;
cleaning restroom facilities regularly;
washing windows;
performing simple ground maintenance;
disposing of trash or rubbish;
handling emergencies within assigned areas.

Custodians regularly use the following equipment:

vacuum cleaners	buckets	steam cleaners
waxers	mops	dustpans
brooms	brushes	sandpaper
dusters	rags	

Most custodians must be familiar with the properties and proper uses of a wide variety of detergents, oils, waxes, and other cleaning, sealing, and polishing agents.

JOB CLUSTER #14
"Public Service"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40-48	$135-235/week	$175/week	$135/week

Those employed by schools, large industries, and government agencies can usually advance to higher salaries than those who work for janitorial services. If you own your own janitorial service, wages can be much higher.

HOURS OF WORK

The standard workweek is forty hours. Some custodians work weekends receiving days off during the week. Many custodians work evenings or nights.

FRINGE BENEFITS

Depending on the length and place of employment, you may receive:

paid vacations and holidays
retirement plan
worker's compensation
health and welfare plans

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs.
You may contact a youth representative at your local Employment Service Office.

Talk to your school custodian for more information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information.

For information about opportunities and training in custodial work under the Manpower Development and Training Act of 1962, check with the local office of the Employment Service.

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Exterminator (any ind.)	389.684-010
Farmhand	404.663-010
Firefighter (any ind.)	373.364-010
Laundry operator	369.684-014

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: DAIRY EQUIPMENT REPAIRER

The DAIRY EQUIPMENT REPAIRER repairs and maintains dairy machinery and equipment such as milking systems, pumps and refrigeration equipment.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Dependable	Mechanical	Normal or corrected vision
Patient	Numerical	Physical stamina
Organizational ability		Average physical strength
		General good health

YOU SHOULD KNOW THAT

-manual and finger dexterity are basic aptitudes for this occupation;
-many dairy equipment repairers are expected to have their own handtools;
-you may have to work overtime.

YOU MUST BE ABLE TO

-use eyes in close work;
-pay attention to detail;
-tolerate dirt on your hands, arms, face, and clothing.

DOT 629.281-018

PREPARATION AND TRAINING:

High school graduation is preferred unless one has had prior job experience. Training in agriculture and mechanics would be beneficial, but is not required.

RECOMMENDED HIGH SCHOOL SUBJECTS:

Auto Mechanics	Science	Blueprint Reading
Shop Mathematics	Mechanical Drawing	Welding
Basic Electricity		

COURSE OF STUDY AFTER HIGH SCHOOL:

Learning the trade is usually done through on-the-job training and a one-year apprenticeship training program. Electricity, welding, and blueprint reading would be a helpful background.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

The number of jobs is expected to increase moderately.
Job openings will result from increased mechanization of dairy farmers and the need to replace experienced repairers who retire or transfer to other work.
Jobs will be found in the dairy areas of the state.

OPPORTUNITIES FOR ADVANCEMENT

Chances for well trained dairy equipment repairers to find work is good and may advance in the following ways:

you may become an installation supervisor
you may open your own private business

MORE ABOUT THE JOB:

Although a dairy equipment repairer repairs and maintains dairy equipment and machinery the repairer needs to know about welding, wiring, and plumbing work in custom fabrication of cow handling and milking systems.

He/she may observe and listen to machines in operation to locate the causes of trouble. Also, he/she dismantles machines and replaces parts or repairs the machine using hand and power tools. The replacement of defective wiring, worn switches, and electrical motor parts are some of the tasks involved.

Work may be done on location at the customer's dairy; or in some cases, systems may be taken back to a shop for overhaul.

JOB CLUSTER #1

"Agribusiness & Natural Resources"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	Salary averaged $7.74/hr in 1978		

Salaries may vary in different areas of the state. You may wish to check a local source for accurate information in your area.

HOURS OF WORK

The usual workweek is forty to forty-eight hours. However, the hours may be irregular due to the necessity for immediate repair and the unusual hours that the dairy farmer works.

FRINGE BENEFITS

Depending on the place and length of employment, you may receive:

overtime pay paid vacations and holidays health insurance

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Information about opportunities under the Manpower Training and Development Act of 1962 can be obtained from the Employment Service.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Farm Equipment Institute
850 Wrigley Building N.
410 North Michigan Avenue
Chicago, Illinois 60611

RELATED OCCUPATIONS:

JOB TITLE:	D.O.T.#:
Laundry Machine Mechanic (laund.)	629.261-010
Treatment Plant Mechanic (waterworks)	630.281-038
Oil Field Equipment Mechanic Supervisor (petrol. prod.)	629.131-014

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: DAIRY FARM WORKER

DAIRY FARM WORKERS feed, water, and milk cows. They are also responsible for a variety of other chores including maintaining and repairing barns and equipment.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Prefer outdoor work	Adaptable to changes in work methods	Good physical strength
Like animals	Able to make independent judgment and decisions	Normal use of hands, arms and legs
Dependable	Mechanical	Normal or corrected vision and hearing
Prefer working alone		
Prefer concrete physical activities		

YOU SHOULD KNOW THAT

-youth and lack of education do not keep you from finding an entry level job as a dairy farm worker.
-you absolutely must show dependability to succeed in a dairy farm job.
-some mechanical aptitude is helpful and may be necessary because of the number of various machines you will work with.

YOU MUST BE ABLE TO

-perform heavy physical labor, including lifting and carrying.
-work while stooping, kneeling, crawling, and crouching and while on ladders.
-work alone without direct supervision.
-follow instructions closely and carry required projects through to completion.

DOT 410.684-010

PREPARATION AND TRAINING:

The dairy farm worker does not need a high school diploma to qualify for a beginning job, but can benefit from a complete high school training for promotional possibilities. The farm worker will receive informal, basic on-the-job training.

COURSE OF STUDY INCLUDES:

High School: Where offered, courses in Vocational Agriculture and related subjects are advised. Business mathematics and shop courses are also good preparatory courses.

On-the-job: Training is given in various maintenance chores, care and handling of machines used, and in animal handling.

ADDITIONAL FACTS ABOUT TRAINING:

Those interested in careers in dairy farming who are not raised on or near a farm should join a 4-H club or the Future Farmers of America in order to find out about farming as a way of life. Those interested in an eventual career in farm management, ownership, or other upper level jobs should investigate college programs related to dairy farming. Some work experience, preferably on a farm, is usually necessary to qualify.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities for dairy farm workers are good for young people who grew up on dairy farms or in rural areas.
Opportunities are best in the leading milk producing areas.

ADVANCEMENT

With small and medium sized dairy farms, promotional opportunities may be limited to the members of the family who own the farm.
With the larger commercial farms, dairy farm workers may advance to jobs as milkers, head milkers, supervisors, and occasionally to jobs in dairy management.

MORE ABOUT THE JOB:

The dairy farm worker must have special knowledge of dairy cattle to perform the variety of tasks involved in dairy farming.

Specifically, these chores include:

- weigh and mix specified feed and feed supplements;
- vaccinate cattle for disease using hypodermic needle or administer vaccine in pill form;
- apply medication to cuts or bruises;
- clean stalls or barns using disinfectant solutions;
- replace bedding in stalls;
- milk cows by hand or machine.

The dairy farm worker may plant, cultivate and harvest the feed for stock.

JOB CLUSTER #1
"Agri-Business and Natural Resources"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	40	$6.50-6.90/hr	$6.75/hr	$6.50/hr

Salaries may vary throughout the state.

HOURS OF WORK
Most workers work six days per week, eight to ten hours per day. Some dairy farm workers work morning-evening split shifts, other straight eight-hour shifts. Most workers work in the early morning whether the shift is split or not.

FRINGE BENEFITS
Depending on length and place of employment, you may receive:

- paid vacations
- workers' compensation
- Social Security
- special garb and equipment

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Information on opportunities in this line through the Manpower and Development Act of 1962 is available at the Employment Service Office.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

United States Department of Agriculture
Washington, D.C. 20250

Department of Commerce
Washington, D.C. 20230

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Livestock farm worker	410.664-010
Game farm helper	412.684-010
Poultry farm worker	411.584-010
Laborer, nursery	405.687-014

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MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: DAIRY HELPER

The DAIRY HELPER peforms a variety of semi-skilled tasks associated with the processing of milk and milk products. They may load and unload products, place milk cartons in boxes, keep machines stocked with cartons, help clean and service machines and other related jobs.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Honest	Some mechanical	Good physical health
Dependable	Some numerical	Normal vision and hearing (natural or corrected)
Neat		
Alert		Free from communicable disease
Pride in work		Eye-hand coordination
Able to take orders		Able to lift heavy objects

YOU SHOULD KNOW THAT

-You may be asked to join a union;
-You will receive on-the-job supervised training;
-Advancement is made on the basis of achievement; after a few months you may be eligible for advancement to better paying positions.

YOU MUST BE ABLE TO

-Learn to perform a variety of relatively routine tasks;
-Work well with others in the processing plant;
-Follow written and oral orders from a supervisor;
-Lift some heavy objects such as crates of bottles;
-Work efficiently and effectively doing the best job in the least amount of time.

DOT 529.686-026

PREPARATION AND TRAINING:

There is no set educational minimum, although many employers today prefer candidates with high school educations. College training normally will not be helpful, although some advanced training may lead to quicker employment and more rapid advancement.

RECOMMENDED HIGH SCHOOL COURSES

A general high school course of study is recommended. Possible courses might include:

Basic mathematics
English
Machine shop

ADDITIONAL FACTS ABOUT TRAINING

After you have accumulated some seniority, usually a minimum of ninety days, you can bid for higher paying jobs such as machine operator. Your employer will provide on-the-job supervised training, usually consisting of operation of a machine under the direction of an experienced worker or supervisor.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Turnover is relatively slow because the pay is above average and the fringe benefits are exceptionally good.

Opportunities in the state of Montana are limited.

OPPORTUNITIES FOR ADVANCEMENT

With sufficient experience, the dairy helper can advance to:

-milk processing machine operator
-production supervisor
-plant superintendent

MORE ABOUT THE JOB:

With experience and seniority, the dairy helper does less unskilled work and more semi-skilled and skilled work. He/she must work about three months on-the-job before being qualified for union bidding for higher paying positions.

Tasks may include:

-Loading products from trucks;
-stacking materials received;
-cleanup of floors;
-cleaning machines, tubes, and pipes;
-keeping various machines well stocked with carton and materials;
-places cartons and bottles in crates and boxes for delivery or shipment;
-stacks boxes and crates of products;
-keeps a record of number of crates packed;
-discards defective cartons and bottles;
-loads crates or boxes of products onto trucks for delivery;
-unloads returned empty bottles;
-takes returned bottles to washers for sterilization;
-helps with minor repair work on machines in plant.

JOB CLUSTER #1
"Agribusiness and Natural Resources"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$6.50-6.90/hr	$6.75/hr	$6.50/hr

Salaries may vary throughout the state.

HOURS OF WORK

Dairy helpers normally work a standard eight-hour shift five days a week. They may work morning, afternoon, or night shift. Usually they begin with night work. There may be some overtime work which is paid at a rate of time plus one-half.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

-life insurance
-retirement plan
-disability insurance
-sick leave
-overtime pay
-paid vacation
-health and medical plans
-paid holidays

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

A local dairy may be able to provide further information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

U.S. Department of Agriculture
Washington, D.C. 20250

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Cannery Worker (can. & preserv.)	529.686-014
Laborer, Cheesemaking (dairy prod.)	529.686-050
Production Helper (food prep.)	529.686-070
Steak, Tenderizer, Machine (slaught. & meatpack.)	529.686-082

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: DAIRY HERDERS

The DAIRY HERDER takes complete charge of a dairy herd including milking procedures, feeding, breeding, health care, calf raising, and record keeping. The supervisor works under the direction of the dairy owner, or on large farms, an overall manager.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Foresight	Scientific	Average general health
Like animals	Verbal	Good physical stamina
Liking for outdoors	Mechanical	No TB or other contagious diseases
	Clerical	
	Numerical	

YOU SHOULD KNOW THAT

-you may have responsibility of 300 or more head of cattle;
-the herder is vitally important to the financial success of the dairy;
-you will be responsible for from two to eight people;
-many herders also serve as artificial inseminators.

YOU MUST BE ABLE TO

-manage cattle operations efficiently and economically;
-keep dairy herd in good health to insure full production;
-carry out the wishes of the owner without need for direct supervision.

DOT 410.131-018

PREPARATION AND TRAINING:

High school or extensive prior experience with dairy cattle is the prerequisite.
College training in dairying will mean a better job with more chance for advancement.

RECOMMENDED HIGH SCHOOL SUBJECTS:

Agriculture	Shop
Life Sciences	Bookkeeping
Mechanics	

COURSE OF STUDY AFTER HIGH SCHOOL:

Animal Diseases	Biology	Bacteriology
Milk Producing	Zoology	Record Keeping
Animal Breeding	Physiology	Analysis

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

As dairy operations get larger, there are more and more owners turning the care of their cattle over to trained dairy farm supervisors.
The number of jobs available is not great.
Jobs are usually found in rural areas, although some dairies are located near cities.

ADVANCEMENT

The herder often can sometimes advance into ownership of his/her own herd.

MORE ABOUT THE JOB:

The dairy farm herder has complete responsibility for the care of the dairy herd. He/she supervises all aspects of care including feeding, health care, and milking.

The herder usually works under supervision of the owner (or, in larger ranches, a manager) who does all buying and sets general policy.

The Herder

- usually lives on the ranch;
- supervises feeding and recommends diet for cattle;
- treats cattle for minor diseases and works with the veterinarian on specific medical problems;
- supervises milkers;
- sees that milking is done correctly;
- works with dairy herd test to insure cows are producing top quality milk;
- may make minor equipment repairs;
- is responsible for calling service representatives when milking machines break down;
- is responsible for breeding of herd, and usually is expected to be a qualified artificial breeding technician;
- may have responsibility for over 300 to 400 cattle including the milking string, springers, and calves.

JOB CLUSTER #1

"Agri-Business and Natural Resources"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	$475-$700/mo	$600/mo	$475-$525/mo

The salary figures given above do not include the rent free house and utilities; often, but not always provided.

HOURS OF WORK

The herder workweek is usually fairly normal, although he or she may have to be up as early as 2:00 a.m. when milkers are having problems or stay up all hours of the night when cows are calving.

FRINGE BENEFITS

Depending on length and place of employment, you may receive;

vacation	health insurance
overtime	sick leave

Almost everywhere, you get a house with all utilities paid and free milk for your family.

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

The Employment Service is your best source of information in this area.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

U. S. Department of Agriculture
Washington, D.C. 20250

RELATED OCCUPATIONS:

JOB TITLE:	D.O.T.#:
Beekeeper	413.161-010
Livestock Rancher	410.161-018
Poultry Farmer	411.161-018

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: DAIRY HERD TESTER (D.O.T. MILK SAMPLER)

DAIRY HERD TESTERS take samples of milk to be tested at a laboratory to determine its butterfat content and quality. They check the dairy farmer's herds monthly. After tests, they may recommend feeding techniques and breeding procedures. They are employed by dairy herd improvement association, and have hours much like those of the dairy farmer.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Precision	Numerical	Good general health
A neat appearance	Clerical	Finger dexterity
Integrity	Speaking	
Honesty		
Mental alertness		
Like animals		

YOU SHOULD KNOW THAT

Hours are irregular and there may be much early morning work;
you may need a helper to work with you to make work more efficient;
you should have a valid driver's license.

YOU MUST BE ABLE TO

-conduct laboratory tests using simple chemistry equipment;
-be organized so milk samples from different cows are not mixed up;
-handle such chemicals as highly concentrated sulphuric acid.

DOT 410.357-010

PREPARATION AND TRAINING:

A high school diploma is desirable. Community college training, a course in business machines and on-the-job training are most helpful.

RECOMMENDED HIGH SCHOOL SUBJECTS:

A course in business mathematics will be important as the process is more and more automated.

Chemistry	Business Math
Animal Husbandry	Accounting
	Bookkeeping

ADDITIONAL FACTS ABOUT TRAINING:

You may start as a helper learning about the job while working for pay.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

The testing process will become more centralized but the actual number of milk testers will probably not decrease as automation takes over.
As dairies become more conscious of the advantages of testing programs, more are signing up for the testing service.

ADVANCEMENT

There is no opportunity for advancement in this occupation without further education. To become a dairy inspector, agricultural salesperson, or equipment serviceperson, a dairy herd tester must pursue further education.

MORE ABOUT THE JOB:

The dairy herd tester's job is to record for the dairy owner/manager the milk production level of each cow in the herd.

Once a month the improvement tester checks at each ranch, takes weight measurements of the milk produced by each cow, and then takes samples of milk from each cow for chemical analysis to determine butterfat content. Results of the tests tell the dairy owner/manager how much to feed certain cows and when it is time to take the cow from the milking line because production has dropped off too much. Research has shown that dairy owners/managers who participate in such testing procedures average a 40% greater return per cow than those who do not participate.

The tests also provide valuable breeding information since they allow ranchers to see which cattle are high volume producers and which are high butterfat producers. By controlled breeding, the dairy owner/manager can develop herds which produce a high volume of milk. The tester's hours are those of the milker. The tester must often be up as early as 2 a.m. and may not be finished in the evening until 7 p.m.

JOB CLUSTER #1
"Agri-Business & Natural Resources"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
		$675-$1000/mo	$800/mo	$675/mo

Salaries vary according to how many cows can be tested by one person.

HOURS OF WORK

Hours of work are irregular and often long. The improvement tester works the morning milking of cattle which usually starts from 2:00 - 4:00 a.m. The tester then has part of the mid-day off and resumes testing with the late afternoon milking.

FRINGE BENEFITS

Depending on the length and place of employment, you may receive:
paid vacation
workers compensation

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

The Employment Service is your best source of information in this area.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

U.S. Department of Agriculture
Washington, D.C. 20250

American Dairy Association
20 North Wacker Drive
Chicago, Illinois 60606

RELATED OCCUPATIONS:

JOB TITLE:	D.O.T. #:
Tester, Food Products (grain and feed mill)	199.251-010
Veterinary Livestock-Inspector (gov. ser.)	073.161-010
Seed Analyst (profess. & Kin.)	040.361-014
Agricultural Extension Specialist	096.127-014
Feed and Farm Management Advisor (agric. ret.tr.)	096.127-018

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: DARKROOM TECHNICIAN

The DARKROOM TECHNICIAN may also be known as a DEVELOPER; works in a photographic darkroom developing, fixing and printing various types of exposed photographic film and prints onto chemically treated paper for prints.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Artistic appreciation	Work in complete darkness	Normal health
Careful work habits	Work with chemicals	Good use of hands and fingers
Ability to work alone	Work with precision timing	Normal or better use of sense of touch and feel
Patience		
Cleanliness and orderliness		

YOU SHOULD KNOW THAT

Darkroom technicians must be capable of learning new techniques regularly; innovations are constant in this field.
Two to five years experience are required to become a fully qualified technician.

YOU MUST BE ABLE TO

Work in complete darkness relying on your senses other than your eyes in performing some of your work;
Work with chemicals and tolerate their odor;
Work using precision timing;
Use your hands in a number of operations requiring skill and care.

DOT 976.681-010

PREPARATION AND TRAINING:

The darkroom technician, for most employers, must have a high school diploma. He or she should demonstrate an interest in the work (photographic hobbies). The darkroom technician can benefit greatly by some college training in photography.

THE COURSE OF STUDY INCLUDES:

High School: Courses recommended include arithmetic, chemistry, photography, art, and shop classes.

College: A major in photography is strongly recommended.

ADDITIONAL FACTS ABOUT TRAINING:

Many employers feel that photographic experience in the military service is a good background for employment as a darkroom technician. You may need formal training such as one or more evening classes even after employment because of the continued introduction of new ideas and techniques. Employers of darkroom technicians are most interested in the desire of the potential employee to learn in the field.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

There is not a great demand for darkroom technicians in this state.
Opportunities for darkroom technicians exist in industry, business, and government agencies as well as laboratories.

OPPORTUNITIES FOR ADVANCEMENT

After gaining skills as darkroom technicians, many workers become photographers.
Others take promotions to technical supervisors in laboratories.

MORE ABOUT THE JOB:

The darkroom technician is skilled in the operation of several jobs needed to produce prints from exposed film. First, the technician develops the film in a darkroom. This is done by immersing the film in a series of appropriate chemicals. This performs several necessary functions: the film is developed, the developing process is stopped, the developed film is fixed and made permanent, the chemicals are removed.

After developing the film, the darkroom technician may work with some light in the printing of the negative. Printing may be either contact printing or projection printing.

Contact printing: the negative and sensitized paper are placed exactly together and exposed to light creating a print the same size as the negative.

Projection printing: the image of the negative is projected through an enlarger on paper mounted on an easel and may be either enlarged or reduced in size through this process.

As in the developing process, fixing chemicals are applied to the prints to make them permanent.

With prints, the darkroom technician: washes, rinses, and dries prints; may cut, number, sort, and mount the prints; may retouch to remove unwanted features; may make proofs for customers; may show customers the proofs; may chemically tone prints to alter colors.

The processing of colored film is more difficult and complex and is usually performed by a specialist in that skill, a color laboratory technician.

Many technicians specialize in one phase, for example, retouching or printing.

JOB CLUSTER #3 - "Communications"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$135-250/week	$160-220/week	$135/week

Salaries may vary. Check a local source for accurate information in your area.

HOURS OF WORK

The normal workweek is forty hours Monday through Friday. The technician in industry may work evenings.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

paid vacations and holidays
profit sharing
health and welfare plans
paid sick leave
retirement plan

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

A local photography shop can give additional information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Professional Photographers of America Incorporated
152 West Wisconsin Avenue
Milwaukee, Wisconsin 53203

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Projection printer (any ind.)	976.381-018
Reproduction technician (any ind.)	976.361-010
Color printer operator	976.382-014
Film laboratory technician	976.684-014

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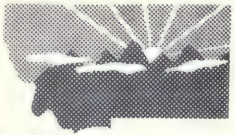

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB:

DATA PROCESSING EQUIPMENT INSTALLER
(D.O.T. - ELECTRONICS MECHANIC)

The AUTOMATIC DATA PROCESSING EQUIPMENT (A.D.P.) TECHNICIAN installs, repairs, maintains, and makes alterations on all types of electro-mechanical and electronic data processing equipment such as electronic computers, tabulators, card-punchers, sorters, collators, converters, and numerous other devices.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Patient	Mechanical	Average strength
Persistent	Numerical	Flexible joints
Dependable	Finger dexterity	Normal hearing
Accurate		Normal vision (natural or corrected)
		Normal color vision
		Good eye-hand coordination

YOU SHOULD KNOW THAT

-Working conditions may vary with employing firms and customers served;
-You will be closely supervised in your trainee stage;
-Most of your work will be done alone;
-Persistent self-education to keep up with changes and improvements in the field is necessary;
-You must have good mechanical aptitude.

YOU MUST BE ABLE TO

-Bend, stoop, lift, and reach for prolonged periods;
-Use eyes on close work for long periods of time;
-Be on call for emergency work;
-Lift heavy objects up to sixty pounds or more;
-Be able to tolerate minor cuts and bruises and possible electric shock.

DOT 828.281-010

PREPARATION AND TRAINING:

The electronics mechanic is expected to have a high school education. He/she should have had courses in electrical theory, electronics, physics, algebra, and trigonometry. He/she is expected to have had some training in electronics, physics, mechanics, and electronic data processing.

THE COURSE OF STUDY INCLUDES:

Electronics	Mathematics	Microwave and UHF
Technical Science (Physics)	English	Transistor Theory and Circuitry

ADDITIONAL FACTS ABOUT TRAINING:

A specified educational background may be required as well as the skills that develop from educational training. Nearly all data processing equipment technicians begin as trainees and only individuals with some background in the principles involved (including some training in electronics within the two year period prior to hire) will qualify for trainee openings.

SPECIAL ENTRY REQUIREMENTS:

The usual age range for applicants for trainee jobs is from 20 to 35 years of age. All firms require high school graduation and electronics training received either in college, vocational school, or a training school of the armed forces. You will be expected to take tests that measure technical background and your familiarity with basic electricity, electronics, and mechanics. If you have military preparation that is thorough, it may satisfy the educational and experience qualifications for trainee jobs.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities are greatest in large urban areas.
Opportunities for jobs in the servicing of electronic business machine systems will be particularly favorable in the years ahead.
ADP technicians have year-round employment.

OPPORTUNITIES FOR ADVANCEMENT

With the data processing industry growing so rapidly, good people can advance quickly. Data processing equipment technicians with experience and additional training may be promoted to:

maintenance supervisor	sales engineering programmer
district service manager	management and administrative jobs

MORE ABOUT THE JOB:

The duties of the data processing equipment technician are to install, repair, maintain, and make alterations on all types of electromechanical and electronic data processing equipment by which firms with widely separated branch offices synchronize company-wide bookkeeping, cost accounting, and inventory control on a current basis.

The electronics mechanic:

- Must be able to understand, use, and interpret results from oscilloscopes, signal generators, and other testing equipment;
- Must study technical manuals, diagrams, and publications to keep up with continual changes being made in the equipment;
- Must often ask probing questions to pinpoint equipment problems;
- Will find there may be considerable customer contact;
- Will find the majority of time is spent in mechanical repair and preventive maintenance;
- Cleans, oils, and adjusts all units as required;
- Re-wires components;
- Solders loose connections;
- Replaces capacitors, transistors, coils, and resistors;
- Uses electrician's hand tools and testing equipment.

JOB CLUSTER #2
"Business and Office"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$220-$300/wk	$250/wk	$220/wk

Salaries may vary throughout the state. You may wish to check a local source for accurate salary information for your area.

HOURS OF WORK

The forty-hour workweek is standard. Most jobs are on the day shift. The job may require that you have your own automobile. You may have to work weekends or be on emergency call basis.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

- paid vacations
- sick leave
- company paid insurance
- company retirement

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

The Employment Service is your best source of information in this area.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

American Society of Engineering Education
Technical Institute Council
Dupont Circle Building
1346 Connecticut Avenue, N.W.
Washington, D.C. 20039

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Dental-Equpment Installer and Servicer	829.261-014
Electrical Appliance Repairer	827.584-010
Cable Splicer (const.; light, heat & power; tel. & tel.)	829.361-010

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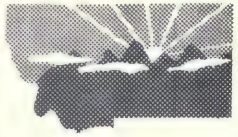

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: DENTAL ASSISTANT

The DENTAL ASSISTANT assists the dentist during examination and treatment of patients. The assistant is responsible for sterilization of instruments and linens, and relieves the dentist of routine duties.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Sympathetic	Spatial	Good general health
Patient	Clerical	Normal vision and hearing
Tactful	Numerical	Full use of hands and limbs
Emotionally stable		Eye-hand coordination
Attention to detail		

YOU SHOULD KNOW THAT

- -You must have good personal grooming habits to work as a dental assistant;
- -You cannot qualify if you are color blind or have poor hearing.

YOU MUST BE ABLE TO

- -Work with persons who may be suffering intense pain;
- -Stand during most of the working day and work in a narrow space;
- -Tolerate unpleasant odors from dental office or patients' breath and teeth;
- -Assume responsibility and carry it through.

DOT 079.371-010

PREPARATION AND TRAINING:

The dental assistant should be a high school graduate. You can complete an approved dental assistant's course or be trained entirely on the job.

Although most dentists want trained help, some would rather train in the specific skills of assisting them.

Courses of study beyond high school should be accredited by the Dental Assistant's Association and the Council on Dental Education.

RECOMMENDED HIGH SCHOOL COURSES:

Typing	English	Life Sciences
Bookkeeping	Shorthand	

COURSE OF STUDY AFTER HIGH SCHOOL:

Dental Office Procedure	Sterilization Techniques
Dental Terminology	Other Related Skills
Anatomy	

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Dental assisting is a high turnover occupation.

Many young people work for a short period, then transfer to other better paying jobs.

The best jobs go to the well-trained, competent, and experienced people.

OPPORTUNITIES FOR ADVANCEMENT

Advancement in a dental office is limited to pay raises as the assistant becomes more competent and the employer's practice grows and prospers.

The dental assistant may, with additional formal education, become a dental hygienist.

MORE ABOUT THE JOB:

The dental assistant prepares patients for examinations, treatment, or dental surgery. They assist the dentist during the examination and treatment of patients. They must be familiar with names and uses of dental instruments and equipment. The dental assistant works under the close supervision of a professional dentist.

Among normal duties are sterilizing instruments, seating patients, draping patients with sterile or other covering, operating suction equipment to keep patient's mouth free of matter, administering mouthwash and assisting during the extraction of teeth.

The dental assistant also keeps the dental office clean and orderly. In some cases, they may also assist in X-ray work, mix material for the dentist's use, and maintain records of dental examinations and appointments.

Clerical duties include:

- -Making appointments;
- -Acting as a receptionist;
- -Typing and sending out bills;
- -Receiving payments;
- -Keeping books.

JOB CLUSTER #8
"Health"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	40	$150-$235/wk	$175-200/wk	$150/wk

Salaries vary throughout the state. Check a local source for accurate information in your area.

HOURS OF WORK

The forty-hour workweek is normal. Dental assistants seldom work holidays. Some dental assistants work half days on Saturdays.

FRINGE BENEFITS

Depending on the length and place of employment, you may receive:

- retirement plan
- health insurance
- dental care at reduced cost or free
- paid vacations
- paid holidays

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Talk to a dental assistant or dentist in your community.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

The American Dental Assistants Association
410 First National Bank Building
La Porte, Indiana 46350

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Chiropractor's assistant	079.364-010
Inhalation therapist	079.361-010
Medical assistant	079.367-010
Surgical technician	079.374-022

MONTANA VIEW

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Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: DENTAL HYGIENIST

A DENTAL HYGIENIST, under the direction of a dentist, provides preventive services in dental health care to the public through clinical services and educational or community services.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Sympathetic	Intelligent	Good general health
Understanding	Verbal	Good dental health
Patient	Numerical	Good finger dexterity
Tolerant	Spatial	Full use of hands and arms
Even temperament	Ability to perceive detail	Good eyesight (natural or corrected)
Dependable	Manual dexterity	Free of communicable diseases
Ability to work effectively with people		

YOU SHOULD KNOW THAT

You will not qualify if:
you have an active communicable disease;
you have a police record for other than minor traffic voilations;
you have poor grooming habits.

YOU MUST BE ABLE TO

-stand for long periods while working with patients.
-work in close contact with patients.
-much patience is required when working with children.
-work with sharp instruments being careful not to cut patient's gums or chip teeth.

DOT 078.361-010

PREPARATION AND TRAINING:

Minimum educational requirement for a dental hygienist is education from a two-year post high school course at a school for dental hygienists approved by the Council for Dental Education of the American Dental Association. A four-year college course leading to a B.A. in dental hygiene is necessary for jobs in schools and public health agencies.

RECOMMENDED HIGH SCHOOL SUBJECTS:

English	Speech	Algebra
Geometry	Biology	Chemistry

POST SECONDARY COURSES

Biology	Dental Anatomy	Psychology
Zoology	Chemistry	Speech
Bacteriology	Histology	Clinical dental hygiene

PROSPECTS AND OPPORTUNITIES:

JOB TRENDS

Opportunities for employment of qualified dental hygienists is excellent.
This is a demand occupation and a shortage of trained help is expected through the 1980's.
Nationally, there are twice as many openings as there are dental hygienist graduates each year.
Opportunities for both men and women exist in dental hygiene.

ADVANCEMENT

There is no established line of probable promotion.

MORE ABOUT THE JOB:

A dental hygienist is licensed to clean teeth under the supervision of a licensed dentist.

The dental hygienist's duties may include:
- scaling and polishing teeth;
- applying prescribed medicine to gums;
- instructing patients in prophylaxis and nutrition;
- preparing for dentist a chart of cavities and other dental problems;
- may order instruments and supplies on instructions from dentist;
- usually exposes and processes X-ray films for dentist's diagnosis;
- may perform receptionist duties;
- may have charge of periodical recall of patients;
- may act as dentist's chairside assistant;
- may carry out certain laboratory procedures.

You must be able to:
- work effectively with people including children;
- work in patient's mouths with dental instruments;
- be effective in motivating patients to practice good dental health habits.

JOB CLUSTER #8
"Health"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
30-40	$5680-$11300	$7200-$8200	$5680-$7200

Earnings of dental hygienists are affected by the type of employer, education and experience of the individual hygienist and the geographic location.

HOURS OF WORK

The dental hygienist may work three to four days a week, dividing the time between two to three employers. In schools, she/he will work a six-hour day. Part-time jobs are frequent in this occupation.

FRINGE BENEFITS

Depending on length and place of employment, you may receive;

- paid vacation
- holidays
- health insurance
- retirement benefits

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Talk to the dental hygienist in a local dentist's office

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

American Dental Association
Council on Dental Education
211 East Chicago Avenue
Chicago, Illinois 60611

Division of Dentistry, Public Health Service
U.S. Dept. of Health, Education & Welfare
9000 Rockville Pike
Bethesda, MD 20014

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.
Electriocardiograph technician	078.362-018
Electroencephalograph technician	078.362-022
Prosthetist-Orthotist	078.261-022
Radiologist	078.362-026

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: DENTAL LABORATORY TECHNICIAN

DENTAL LABORATORY TECHNICIANS make artificial dentures and other kinds of dental work prescribed by dentists. They do not work directly with patients.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Precise	Spatial	Normal vision
Patient	Mechanical	Good color perception
Accurate	Numerical	Eye-hand coordination
Artistic ability	Verbal	High degree of manual and finger dexterity
Concern for detail	Intelligent	

YOU SHOULD KNOW THAT

-you will be expected to use small hand tools, electric lathes, and drills;
-you may have to work evenings and on Saturdays as a beginner;
-you will often be required to meet production deadlines;
-most dental labs employ three to six persons.

YOU MUST BE ABLE TO

-use eyes in detailed work for long periods of time;
-perform work which meets rigid quality standards.

DOT 712.381-018

PREPARATION AND TRAINING:

This occupation usually requires a combination of two years of schooling and on-the-job training.

RECOMMENDED HIGH SCHOOL COURSES:

English	Algebra	Geometry
Biology	Chemistry	Physics
Art	Bookkeeping	

COLLEGE COURSE OF STUDY:

Chemistry	Art	Dental Science
Anatomy	English	

ADDITIONAL FACTS ABOUT TRAINING:

You must supply your own uniforms. Part-time jobs are frequent in this occupation. Increasing emphasis is being placed on specialization if employed in a larger laboratory. Greater emphasis is being placed on formal education for dental technicians as skill requirements rise.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Employment prospects for the well qualified all around craftworker and for the specialist in ceramics, gold, and other dental work are expected to be very good.

OPPORTUNITIES FOR ADVANCEMENT

Limited, but with additional training and experience, you may work as a supervisor in a large laboratory or in a dental technician's school.

MORE ABOUT THE JOB:

The dental technician works from a written prescription and from an impression of the patient's teeth supplied by the dentist. Depending on the nature of the difficulty, the technician may often consult with the dentist by telephone.

In commercial dental laboratories, the dental technician is responsible for the fabrication of any dental appliance specified by the dentist. For example, the technician may prepare:

- orthodontic corrective appliances;
- ceramic or plastic teeth and crowns;
- metal castings for dentures;
- gold or other metal bridge.

A dental laboratory technician may specialize in a certain area.

Speech, hearing, or lower limb handicaps would not deter a person from preparing for this job.

You must be able to:

- use eyes constantly;
- display intense concentration;
- work for long periods while sitting;
- use small hand tools, electric lathes, and drills.

JOB CLUSTER #8
"Health"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$837-$1419/mo	$1050/mo	$837/mo

Earnings of Dental Laboratory Technicians depend on their training, skill and experience. Dental Laboratory Technicians who are self-employed may have high earnings.

Salaries may vary throughout the state. Check a local source for accurate salary information in your area.

HOURS OF WORK

The forty-hour workweek is normal. Emergencies may require some overtime. Some laboratories work a few hours on Saturday.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

- -health insurance
- -retirement plan
- -paid vacation and holidays
- -sick leave benefits
- -bonuses

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

A local dentist can refer you to a dental laboratory technician.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

American Dental Association
Council on Dental Education
222 East Superior Street
Chicago, Illinois 50611

Department of Medicine and Surgery
Veteran's Administration
Washington, DC 20402

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Contour Wire Specialists (Denture)	712.381-014
Hearing Aide Repairer	719.381-014
Bench Molder (Dental Equipment)	
Dental Ceramist	712.281-010
Denture Model Maker	712.681-014

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: DENTIST

DENTISTS diagnose and treat physical problems of the teeth and gums as well as advise patients in preventive care techniques. Some dentists specialize in a particular area of dental work.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Patient	Intelligent	Good hearing and vision (natural or corrected)
Friendly	Verbal	Above average ability to use hands, arms, and fingers
Emotionally stable	Numerical	Freedom from serious back disorders
Good judgment	Finger dexterity	Normal ability to move about
Orderly work habits	Form perception	

YOU SHOULD KNOW THAT

A total of eight years of college and dental school is normally taken in preparation.
Working conditions are usually pleasant.
Normal hazards of the occupation include problems of the back and feet because of the necessity to stand while working (many sit now), and loss of hearing (high frequency hearing loss) from high speed handpower drill noise.

YOU MUST BE ABLE TO

Learn and apply knowledge and concepts in large numbers and of considerable intellectual difficulty;
Perform precise operations on small objects using hands and fingers;
Explain in terms familiar to a patient the nature of dental problems and the necessity of treatment plans.

D.O.T 072.101-010

PREPARATION AND TRAINING:

The entist must have a high school diploma, three to four years of college, complete four years of dental school training, and have a license (issued on the basis of completion of a state administered test) to practice in a given state.

THE COURSE OF STUDY INCLUDES:

High School: A college preparatory major with emphasis in mathematics and science is recommended.

College or University: Each dental school requires certain undergraduate requirements. Generally, programs in the physical and life sciences and mathematics are taken.

Dental School: A four-year full-time program covering all phases is offered. One or more summers at school will be required during the program.

ADDITIONAL FACTS ABOUT TRAINING:

It is extremely important for a high school student to plan years in advance if he or she plans to become a dentist. High school and college courses taken and good grades in both help in gaining entry to dental school.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities for entering dentists are adequate in Montana.
Most dentists are employed in private practice.

OPPORTUNITIES FOR ADVANCEMENT

Advancement usually takes the form of increased revenues as the size of the clientele served by the dentist increases.

Some dentists take postgraduate specialized training in orthodontics, periodontics, and other areas of the profession. Specialists generally earn more than those in general practice.

MORE ABOUT THE JOB:

In the course of a given day, the dentist may work on all kinds of problems on children and adults and use a wide variety of machines and instruments and numerous professional techniques. Some of the specific operations performed by the dentist include:

- filling cavities
- extracting teeth
- administering anesthetics
- replacing missing teeth
- cleaning teeth
- taking impressions of teeth
- taking x-rays of teeth and gums

Dentists also design and construct dentures and perform other laboratory work.

JOB CLUSTER #8
"Health"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary

Salaries for dentists are unlimited. The national average for 1978 was $50,000.

Location is one of the major factors affecting the income of dentists who open their own offices.

HOURS OF WORK

The usual work week is around forty hours, Monday through Friday. Emergencies occasionally require weekend and night work. Hours of private practice dentists are flexible and depend on the individual.

FRINGE BENEFITS

Most dentists must arrange their own fringe benefits. Most take some vacation each year, though it is not usually paid. Health, life, and other insurance is usually purchased on an individual basis.

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

A local dentist can provide you with further information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

American Dental Association
Council on Dental Education
211 East Chicago Avenue
Chicago, Illinois 60611

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Orthodontist	072.101-022
Periodontist	072.101-030
Prosthodontist	072.101-034
Pedodontist	072.101-026
Oral Surgeon	072.101-018

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: DETECTIVE

DETECTIVES carry out investigations to prevent crimes or to solve crimes by scientific and professional means. They may be employed by local, county, state, or federal agencies.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Courage	Verbal	Good general health
Honesty	Numerical	Physical stamina
Tact	Spatial	Good vision
Alertness	Clerical	Normal hearing
Good judgment		Agility
Understanding		

YOU SHOULD KNOW THAT

Detectives normally begin as patrollers and then advance to detective positions;
You should have preference for working with people;
You must be able to work well in situations involving stress, both physical and mental.

YOU MUST BE ABLE TO

Work irregular hours;
Recognize evidence at the crime scene and adopt an effective course of action;
Establish and maintain cooperative working relationships;
Withstand a security check on your past personal and police records.

DOT 375.267-010

PREPARATION AND TRAINING:

High school graduation is an absolute requirement. Some college training is always preferred. In the large metropolitan areas, graduation from a four-year college is preferred.

RECOMMENDED HIGH SCHOOL SUBJECTS:

English	American History	American Government
Typing	Speech	Geography
Math		

COURSE OF STUDY AFTER HIGH SCHOOL:

Two-year and four-year colleges provide excellent courses for potential detectives. Dawson Community College does have a course in law enforcement.

The following schools offer criminal justice courses:

College of Great Falls, Great Falls, Montana
Flathead Community College, Kalispell, Montana
Carroll College, Helena, Montana
Montana State University, Bozeman, Montana
University of Montana, Missoula, Montana

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

While demands are increasing for the detective, competition is keen for openings and advancement. Opportunities to advance are best in the larger cities.

OPPORTUNITIES FOR ADVANCEMENT

The detective with initiative and ability may be promoted in several ways:

-remain an investigator but be promoted in rank to sergeant or lieutenant;
-become a specialist in such areas as narcotics or criminal identification;
-after considerable on-the-job experience, advance to the detective division or one of its units such as the vice squad or identification bureau.

MORE ABOUT THE JOB:

The detective's job is mostly one of investigating crimes, and the person that agencies rely on to track down the criminal responsible for a crime. The detective may work either from crime reports filed by police officers, or in major crimes, be called directly to the scene to do the basic investigation. The detective may:

- -interview witnesses and victims to see if they can provide clues to the identity of the people responsible;
- -check the physical evidence at the crime scene to see if it fits the method of operation of known criminals;
- -perform statistical crime analysis;
- -check a crime scene for fingerprints;
- -work with police officers in crime prevention measures if a pattern of burglaries is detected;
- -question suspects about their whereabouts at the time the crime was committed;
- -stake out homes of criminal suspects watching for unusual activity;
- -obtain search and arrest warrants and make searches for evidence such as stolen goods and arrest suspects;
- -prepare evidence for submission to the district attorney's office in court cases;
- -testify in court about the investigation;
- -keep accurate files, records and reports of all investigations.

JOB CLUSTER #14
"Public Services"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	$800/mo - $1000/mo	$875/mo	

Salaries may vary. Check a local source for accurate information for your area.

HOURS OF WORK
Detectives may be required to work all hours of the day. The forty-hour week is usual, but some work forty-eight hours. Weekends and holidays are often worked. They must be on call any hour of the day or night. On many cases, it is necessary to work straight through on a job or until it is completed.

FRINGE BENEFITS
Depending on length and place of employment, you may receive:

paid vacations	sick leave	liability insurance
paid holidays	health insurance	
retirement programs	life insurance	

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LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

The local police department can provide you with more details.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

International Association of Chiefs of Police
1319 Eighteenth Street, N.W.
Washington, D.C. 20036

Peace Officers Standards and Training Council
1330 Helena Avenue
Helena, Montana 59601

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Police Sergeant	375.133-010
Police Officer	375.263-014
Customs Enforcement Officer	168.267-018
Investigator (insurance)	020.167-014

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MONTANA VIEW

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Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: DIESEL MECHANIC

A DIESEL MECHANIC tests, inspects, and repairs diesel engines. Most DIESEL MECHANICS are truck and heavy equipment mechanics but are actually trained to repair all types of diesel machines. DIESEL MECHANICS may engage in special fields of this occupation, such as repairing fuel injection systems, turbo charges, cylinder heads, starting systems, or rebuilding engines. Most often a DIESEL MECHANIC must keep construction and transportation equipment in safe operating condition. To obtain a government position the MECHANIC may need to obtain security clearance.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Pride in work	Mechanical	Average physical strength
Patience	Numerical	Normal vision and hearing
Honesty	Spatial	Stamina
Ability to organize	Problem solving ability	Eye-hand coordination
Ability to work with others	Manual dexterity	

YOU SHOULD KNOW THAT

-manual and finger dexterity are basic aptitudes for this occupation;
-all diesel mechanics are expected to own their own hand tools;
-being in good physical condition is essential;
-you may be expected to work ten to twelve hours per day if the need arises;
-you may be required to join a union.

YOU MUST BE ABLE TO

-use eyes for close work;
-reach for and handle heavy equipment;
-pay attention to detail;
-lie in awkward or cramped positions for extended periods;
-tolerate gas, oil, grease, and dirt on your hands, arms, face, and clothes.

DOT 625.281-010

PREPARATION AND TRAINING:

Most employers expect applicants to have a high school diploma. Some college or trade school training is preferred and will increase your chances of finding and holding employment in this field.

RECOMMENDED HIGH SCHOOL COURSES:

Auto Mechanics	Shop	Mathematics
Science	Basic Physics	Blueprint Reading
Mechanical Drawing	Welding	Basic Electricity

COURSE OF STUDY AFTER HIGH SCHOOL:

Some of the vocational-technical centers offer training in mechanics. Many diesel mechanics put in a three to four year apprenticeship. Others may enter the field with no formal training and learn on the job.

APPRENTICESHIP:

Apprenticeship programs of usually four years are available. Trade or technical schools provide training. One may be a mechanic for gasoline-powered equipment and then learn the trade by assisting experienced diesel mechanics.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

The government and diesel dealers employ many diesel mechanics.

Industries are expected to increase their use of diesel engines as these continue to replace gasoline engines in a variety of equipment.

A moderate increase in demand exists for workers in this occupation.

OPPORTUNITIES FOR ADVANCEMENT

A well-trained worker may become a specialist in a large shop, a master mechanic, a diesel salesperson or a foreperson, or owner of a repair shop.

MORE ABOUT THE JOB:

Diesel engines, in the realm of power transportation, are heavy trucks and buses, ships and boats, locomotives, bulldozers, cranes, and farm equipment. Other diesel powered equipment includes generators, compressors, and pumps used in public utilities and oil well drilling rigs.

Some diesel mechanics specialize in rebuilding engines or repairing fuel injection systems, turbo-chargers, cylinder heads, or starting systems. Diesel mechanics use common hand tools such as pliers, wrenches, screwdrivers. Special tools include valve re-facers, and piston pin fitting machines.

Grinders, drills, and lathes are used to make replacement parts.

JOB CLUSTER #15
"Transportation"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40-48		Journeyman Worker $9.36/hr	

Salaries may vary throughout the state. There may be differences between union and non-union wage scales.

HOURS OF WORK

The forty hour week is standard with a single-shift day, usually beginning at 8 or 9 a.m. A few establishments, however, work around the clock in which case there may be several pay rates for evening or night shift.

FRINGE BENEFITS

These may vary with length and place of employment:

- retirement plan
- health and life insurance
- disability
- paid vacation
- paid holidays
- sick leave

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Sheet Metal Workers' International Association
1000 Connecticut Avenue N.W.
Washington, D.C. 20036

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Coin Machine Mechanic	639.281-014
New Car Get-Ready Person	806.361-026
Automobile Mechanic	620.381-010
Motorcycle Mechanic	620.281-054
Aircraft Mechanic	621.281-018
Farm-Equipment Mechanic	624.281-010

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: DIETARY AIDE

The DIETARY AIDE works with a dietitian in the preparation and service of food served in hospitals, nursing homes, schools, and similar institutions.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Conscientious	Numerical	Good general health
Good grooming	Mechanical	Physical stamina
Excellent personal hygiene habits	Verbal	Good vision
Work well with others		
Interest in science		

YOU SHOULD KNOW THAT

- You will work for long periods of time on your feet;
- You must be able to compute quantities;
- You may be exposed to heat and moisture from kitchens;
- Your working conditions are usually in clean, pleasant surroundings.

YOU MUST BE ABLE TO

- You must be able to stand for long intervals;
- Type and use a 10 key adding machine.

DOT 077.121-010

PREPARATION AND TRAINING:

You should have a high school education. When available, a course in food service is recommended. The Billings Vocational-Technical Center offers two years in food services.

RECOMMENDED HIGH SCHOOL COURSES:

English	Mathematics
Home Economics	Chemistry

In order to become a dietitian, the minimum educational requirement is a bachelor's degree with a major in foods and nutrition or institutional management, plus one year of dietetic internship in a program approved by the American Dietetic Association, or three years of experience including two years of experience under the supervison of a member of the Association.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITIES AND DISTRIBUTION

Opportunities for dietary aides exist throughout the state.

Most jobs will be available with continued expansion--completion of new hospitals and homes for elderly.

OPPORTUNITIES FOR ADVANCEMENT

Opportunities for advancement are limited without further education.
With a bachelor's degree, however, you may become a dietitian and advance to assistant director or director of a dietary department.

MORE ABOUT THE JOB:

Specific duties of the dietary aide include:

-Maintaining cleanliness of food service areas and equipment;
-assisting with the serving of meals;
-cleaning of kitchen and utensils in accordance with sanitary standards;
-keeping records such as number of meals served;
-direct preparation of food and beverages;
-assist in planning menus.

The dietary aide also may assist in a therapeutic dietitian in planning special diets based on physical and psychological needs of patients.

JOB CLUSTER #5
"Consumer and Homemaking"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$3.20-$4.00/hr.		$3.20/hr.

Because of varying rates of pay throughout Montana, specific information on salaries may be obtained at your nearby employment office or hospital.

HOURS OF WORK

The normal work-week is forty hours. You may work weekends and holidays.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

-medical insurance
-life insurance
-retirement plan
-paid vacations and holidays
-meals and laundry provided

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Check with a local hospital and talk with the dietary aide in order to obtain further information.

ADDITIONAL SOURCES OF INFORMATION:

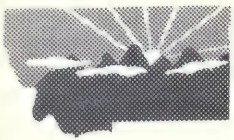
Your school counselor and librarian may also help you find additional information

The American Dietetic Association
430 North Michigan Avenue - 10th Floor
Chicago, IL 60611

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Food Service Supervisor	319.137-010
Manager, industrial cafeteria	319.137-018
Baker	526.381-010
Cook, pastry	313.381-026
Cook, short order	313.361-022

D.O.T. Fourth Edition, page 60



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: DINING ROOM ATTENDANT

The DINING ROOM ATTENDANT assists in the operation of a cafeteria or restaurant by performing a variety of duties including setting tables, cleaning tables, carrying food trays or carts to tables, filling water or coffee cups and moving tables. They may also perform duties in the kitchen area.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Dependable	Manual dexterity	Good general health
Thorough		Free of communicable disease
Neat		Physical stamina
Ability to take orders		Ability to lift heavy trays
Ability to adapt to routine		Eye-hand coordination
		Normal vision and hearing

YOU SHOULD KNOW THAT

-you may be required to work a split shift;
-during slow seasons, you may be laid off;
-most employers require a high school education, but there is no set minimum education level;
-your employer will provide on-the-job training if needed;
-many dining room attendants are represented by a union.

YOU MUST BE ABLE TO

-work on your feet most of the day;
-get along with all types of people, including co-workers and customers;
-work hard and steadily during rush hours;
-maintain a courteous disposition no matter how you feel;
-lift heavy objects, usually trays loaded with plates and glasses;
-carry trays from dining area to kitchen.

D.O.T. 311.677-010

PREPARATION AND TRAINING:

There is no set minimum educational requirement although many employers require a high school education. Many employers also hire high school students to work after school and evenings.

RECOMMENDED HIGH SCHOOL SUBJECTS: Mathematics, Bookkeeping, Public Speaking, Food Services

ADDITIONAL FACTS ABOUT TRAINING

Most employers provide on-the-job instruction and training, usually consisting of supervision by the restaurant manager and learning the procedures of the restaurant. Generally, there is little training necessary. The job is unskilled and requires mainly an ability to carry trays of plates and clear tables as quietly and quickly as possible. Previous experience working in a cafeteria or restaurant may lead to other possibilities of employment. Many restaurants hire high school students part-time and once they complete school, they are given full-time jobs.

A dining room attendant is a good place to start training for any future job in the food service field.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities are excellent and are expected to increase.
Turnover is relatively rapid.
Opportunities are best in the cities.
Opportunities are available for part-time, summer or full-time employment.

ADVANCEMENT

With experience, training and seniority the dining room attendant may become:

Head waiter or waitress, assistant manager, cook
waiter or waitress, restaurant manager

MORE ABOUT THE JOB:

The duties of a table busser may include:

-assist the waiter or waitress in performing their duties;
-move single tables together to form long tables;
-help set tables, putting on tablecloths, place settings and water;
-fill water glasses before and during dinner and check coffee cups;
-carry trays or carts of food to table for waiter or waitress to serve;
-clean table of dishes between dinner and dessert and after customer leaves;
-reset table for next customers;
-keep salt and pepper shakers, sugar bowls and napkin holders filled;
-keep serving centers stocked with saucers, dressings, coffee and other items;
-carry dirty dishes from tables to kitchen area;
-serve mainly as a dishwasher and/or be responsible for clean-up chores;
-assist the chef in preparing salads and other things;
-perform some custodial and janitorial duties;
-work with host, hostess or cashier.

JOB CLUSTER #12

"Personal Services"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	40	$3.10/hr plus tips		

In some restaurants, the table bussers get a percentage of the tips received by waiters and waitresses. Tips should bring the salary up to the minimum wage scale.

Salaries may vary throughout the state. Check a local source for accurate salary information for your area.

HOURS OF WORK

The table busser usually works forty hours a week but may work some overtime. Split shifts, night work and weekend work are quite common in this job.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

health plan	sick leave	overtime pay
life insurance	free meals	paid vacation

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs.
You may contact a youth representative at your local Employment [illegible]

A local restaurant will have further information.

ADDITIONAL SOURCES OF INFORMATION:

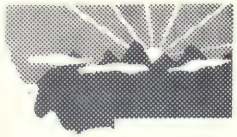
Your school counselor and librarian may also help you find additional information

Hotel and Restaurant Employees and
Bartenders International Union (AFL-CIO)
525 Walnut Street
Cincinnati, Ohio 45216

Educational Director
National Restaurant Association
1530 North Lakeshore Drive
Chicago, Illinois 60610

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Car hop	311.477-010
Counter attendant	311.677-010
Waiter/Waitress	311.477-030



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: DINING ROOM HOST/HOSTESS

The DINING ROOM HOST/HOSTESS greets the customers in a restaurant or club, cordially escorts them to a table and gives them menus. They also train waiters/waitresses and table bussers and supervise their work.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits		Aptitudes	Physical Abilities
Extrovert	Understanding	Verbal	Good general health
Pleasant	Punctual	Numerical	Good eyesight & hearing (normal or corrected)
Tactful	Friendly	Clerical	Full use of legs
Cheerful	Responsible	Ability to organize	
Patient			

YOU SHOULD KNOW THAT

A dining room host/hostess should be able to speak and express themselves well.
A neat and presentable appearance and talent for choosing clothes are necessary.
The best way for a dining room host/hostess to deal with the other employees is to demonstrate their willingness to help them in every way possible.
The workers will be better trained and they will stay longer on the job if the host/hostess is understanding and friendly.

YOU MUST BE ABLE TO

-meet people and be interested in what they have to say;
-stand on your feet for long periods of time;
-handle complaints tactfully and patiently;
-supervise other employees;
-assume a lot of responsibility and carry out many tasks.

DOT 310.137-010

PREPARATION AND TRAINING:

A period of about two weeks on-the-job training is necessary to learn the basic tasks connected with this occupation. During this time, the trainee not only learns how to take reservations, seat people and hand out menus, but they become acquainted with many facets of the other workers' jobs so that they can help them when necessary.

Knowledge of how many tables each waiter or waitress can service and how long it takes the chef to prepare "made-to-order" dishes is needed.

Several weeks' experience is necessary before catering parties; this includes becoming familiar with prices of the catered party and the services that are available before questions can be answered.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Restaurants and country clubs have expanded in the past few years. The public is drawn to places that provide special services which indicate there will continue to be a large demand for the services of dining room host or hostesses.

OPPORTUNITIES FOR ADVANCEMENT

The position of dining room host or hostess is an advancement over a waiter or waitress or a table busser. Advancement opportunities may come by way of a higher salary or by way of part or entire ownership of restaurant or club.

Advancement opportunities may be to assistant manager or manager.

MORE ABOUT THE JOB:

Before the guests start to arrive, the dining room host or hostess prepares the menus of the day.

The dining room host or hostess assigns extra tasks called side work to the waiter or waitress and sees to it that they complete their job.

Many people telephone the restaurant to make reservations for their groups for definite times; the dining room host or hostess takes these reservations and records them immediately.

The primary function of the host or hostess is to see that guests are comfortable by escorting them to the table and presenting each one with the menu. Often you may suggest items which are "featured items" for the day.

Experienced dining room hosts or hostesses are often asked to arrange large parties for customers, such as banquets, wedding receptions and other special celebrations.

Another important part of the host or hostess' work is to act as an intermediary when the customer complains about the food or service.

JOB CLUSTER #12
"Personal Services"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$2.65-3.50/hr	$2.70-2.80/hr	$2.65/hr

Tips are usually in addition to wages; however, each restaurant or club may have specific policies governing distribution of tips among employees.

Salaries may vary throughout the state. Check with a local source to obtain accurate salary information for your area.

HOURS OF WORK

Ordinarily a full-time host or hostess works a shift that runs from 4:30 p.m. to 1:00 a.m. You may work a split shift, three hours at noon and five hours in the evening.

FRINGE BENEFITS

Depending on place and length of employment, you may receive the following:

life insurance
one or two free meals a day
discounts on carryout orders of food
(check local area for vacation and holiday policy)

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Talk to a hostess at a local restaurant.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

National Restaurant Association
8 South Michigan Avenue
Chicago, Illinois 60600

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Chaperon	187.167-186
Waitress/Waiter	311.137-014
Steward/Stewardess, Banquet	310.137-022

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: DISHWASHERS (Kitchen Helper)

DISHWASHERS (Kitchen Helpers), working by hand or with machine, are responsible for washing and maintaining supplies of clean dishes, pots, pans, and utensils in all types of eating establishments and institutions.

REQUIREMENTS AND QUALIFICATIONS:

[illegible]	Aptitudes	Physical Abilities
Prefer routine work	Mechanical	Good general health
Personal cleanliness	Good finger dexterity	Normal eyesight and hearing
Dependable		Good eye-hand coordination
Responsible		Physical stamina
Willing to follow instructions		

YOU SHOULD KNOW THAT

Dishwashers must be free of communicable disease.
Many dishwasher jobs are available to youths less than eighteen years of age.
Dishwashers are subject to cuts and burns from working in hot water and with dishes and glassware.

YOU MUST BE ABLE TO

Work while standing or walking most of the time;
Perform a few routine tasks for long periods of time;
In some jobs, do a great deal of bending over to pick up loads of dishes;
Carry weight, sometimes more than fifty pounds;
Work in cooperation with other kitchen employees;
Work in hot, wet, and sometimes noisy kitchens.

DOT 318.687-010

PREPARATION AND TRAINING:

High school graduation is preferred, but not necessary. For most jobs, you must show evidence of dependability as a worker. You will be trained briefly on-the-job.

RECOMMENDED HIGH SCHOOL COURSES:

Basic Arithmetic
Social Studies
Personal Hygiene

ADDITIONAL FACTS ABOUT TRAINING:

Many jobs as dishwasher are available to those with no work experience, particularly in smaller eating establishments such as neighborhood restaurants. Dishwashing jobs are often part-time and are used by students to help pay educational expenses.

Dishwashing experience can often lead to a better paying and more responsible job in the food industry. It is at this time you can prove dependability, a most important virtue in the food business.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities are and will continue to remain good because the low pay dishwashers receive leads to high employee turnover and many job openings.

OPPORTUNITIES FOR ADVANCEMENT

Advancement depends largely on the ambition of dishwashers themselves. Those who learn kitchen skills beyond washing dishes can go on to jobs as kitchen helpers and cooks.

MORE ABOUT THE JOB:

Dishwashers are employed by restaurants, hotels, hospitals, and other institutions which serve food. Dishwashers are known as hand or machine dishwashers, depending on whether or not they use a commercial dishwashing machine on the job.

Typical duties performed by dishwashers include:

-washing pots and pans by hand;
-using detergent in hot water;
-washing utensils, plates, glasses, and other eating implements by hand or machine;
-moving pots, pans, silverware, plates, and other utensils from washing area to proper storage places.

In addition to their standard duties, a dishwasher may:

-mop and sweep floors;
-empty trash and garbage;
-wash worktables;
-wash and clean vegetables.

In larger institutions and other establishments which serve large quantities of food, the dishwasher is more likely to specialize in one or two tasks such as operating a dishwashing machine.

JOB CLUSTER #12
"Personal Services"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
37½-40	Minimum Wage*		

*If a dishwasher shares in tips, the hourly wage plus tips must equal the minimum wage.

Salaries may vary throughout the state, check a local source for accurate information on wages.

HOURS OF WORK

Dishwashers in some establishments may work up to sixty hours per week; however, the workweek in a union house is forty hours. Nights, weekends and split shifts are normal for some dishwashers. Part-time dishwashers may work a few hours evenings and/or weekends.

FRINGE BENEFITS

Depending on place and length of employment, you may receive the following:

medical insurance	sick leave
life insurance	meals while working
uniforms	profit sharing

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Check at a local restaurant for more information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Hotel and Restaurant Employees and Bartenders International Union
525 Walnut Street
Cincinnati, Ohio 45216

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Counter supply person (hotel and restaurant)	319.687-010
Cook helper (pastry)	313.687-010
Packer/helper (bakery products)	929.686-010

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: DISPENSING OPTICIAN

DISPENSING OPTICIANS fit and adjust eyeglasses from prescriptions of opthamologists and optometrists. Some opticians also perform related laboratory work on the glasses.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Tact	Verbal	Good general health
Patience	Mechanical	Good vision and hearing
Perseverance	Technical	Good eye-hand coordination
Concentration		Finger dexterity
Desire to serve others		Good spatial perception
Pride in workmanship		
Sales ability		
Neat appearance		

YOU SHOULD KNOW THAT

Several years of training are required before you can qualify as a fully competent dispensing optician.
Dispensing opticians may work for large and small businesses or be self employed.
Working conditions are pleasant and hazards are relatively insignificant.
Demand for dispensing opticians is expected to grow in the future, making this occupation an attractive one for those who can qualify.

YOU MUST BE ABLE TO

Communicate verbally, tactfully, and with understanding with people for whom you perform a service;
Perform precise measurements related to eyeglass needs, correctly using fine measuring instruments;
Master certain required technical knowledge necessary to insure professional competence;
Convince potential customers of the value of your service using sales techniques.

DOT 713.361-014

PREPARATION AND TRAINING:

The dispensing optician must have a high school diploma. The best preparation will include some college training. Several years of on-the-job training is necessary in order to qualify as a dispensing optician.

RECOMMENDED HIGH SCHOOL COURSES:

Algebra	Mechanical Drawing
Geometry	The Basic Sciences
Physics	

ADDITIONAL FACTS ABOUT TRAINING:

Completion of a two-year program in opthalmic optics provides the best preparation. Entry may also be gained by finding a job with an optical company and working up.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

The total number employed in this field is limited.

OPPORTUNITIES FOR ADVANCEMENT

With large optical firms, dispensing opticians may advance to positions as branch managers, shop superintendents, or may go into other departments such as sales.

Independent, self-employed dispensing opticians advance to the extent that they make their business more successful and profitable by good work and business practices.

MORE ABOUT THE JOB:

The main function of the dispensing optician is to fit glasses for customers and to sell frames. Fitting is done on the basis of a prescription supplied by a physician or optometrist. The dispensing optician does not give examinations or diagnose problems. The optician performs a valuable and necessary service for those who wear glasses. Specific duties include:

-assisting customers in the selection of proper frames for facial type;
-measuring various parts of the face and eyes for proper distances from eyeglass lense to eye;
-reading prescriptions and preparing work orders for the job of making the glasses;
-assembling glasses in frames when the lenses are prepared;
-fitting the completed glasses on customers;
-making necessary adjustments in frames to insure perfect fit; this involves bending and/or heating plastic frames to make them correspond to the facial requirements of the individual customer.

Dispensing opticians use a number of small hand tools including:

optical pliers	screwdrivers
files	other precision instruments

Some dispensing opticians also work with contact lenses, a specialized field of work which involves great care and knowledge.

Some opticians also sell prescription binoculars, sunglasses, and other products.

JOB CLUSTER #8
"Health"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	$675/mo - $1025/mo		

Salaries may vary according to geographical areas. A local source should be checked for accurate salary information.

HOURS OF WORK

The normal work week is forty hours. Retail dispensing opticians may work Saturdays adding to the length of the work week.

FRINGE BENEFITS
Depending on length and place of employment or whether you are self-employed, you may receive:

paid vacations	profit sharing plans
commissions	group life and health insurance
bonus plans	

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LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

A local optician or optometrist can give you more information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Associated Opticians
1250 Connecticut Avenue, N.W.
Washington, D.C. 20036

American Board of Opticianry
821 Eggert Road
Buffalo, N.W. 14226

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Service Engineer	638.261-018
Fabrication and repair of opthalmic goods	716.280-010
Eyeglass Inspector	713.384-014
Lens Mounter	713.681-010

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MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: DISPLAYER or DISPLAY PERSON

The DISPLAYER provides a supporting service to the major activity of selling through arranging merchandise to attract the prospective buyer.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Imaginative	Manual dexterity	Normal physical strength
Dramatic flair	Numerical	Good color perception
Neatness	Clerical	Normal vision
Ability to work well	Finger dexterity	
Artistic		

YOU SHOULD KNOW THAT

- -The field is highly competitive;
- -Proven ability and talent count far more than formal schooling;
- -It is difficult to enter the field; most enter by way of sales or clerking jobs;
- -You must be a good housekeeper (dismantling, storing materials for future use);
- -Displayers' work is "ten percent inspiration and ninety percent perspiration".

YOU MUST BE ABLE TO

- -Work with messy tools of the trade--paint, glue, plaster;
- -Work quickly and orderly with thoroughness and industriousness;
- -Be resourceful, clever and imaginative in developing designs that attract buyers.

D.O.T 298.081-010

PREPARATION AND TRAINING:

The display person needs a high school diploma to enter into this world of work. On-the-job training in most cases is more prevalent than a formal education.

RECOMMENDED HIGH SCHOOL COURSES

Art	Industrial Art
Design	Mechanical Drawing
Color composition	Woodwork

ADDITIONAL FACTS ABOUT TRAINING

A flair for art and design is very important. Originality, adaptability and art sense are premium qualities. On-the-job training is the most frequent way of entrance into this field.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Demands for display persons are steady but small.

This is a highly competitive field and only the very best succeed.

ADVANCEMENT

Lines of promotion are not distinct in this occupation.

Talent counts most heavily in promotions.

People in large stores may advance from helper to display person, senior display person, department manager and occasionally to advertising manager.

MORE ABOUT THE JOB:

Business competition has advanced the service rendered by display people to high importance as they seek to attract prospective buyers through:

-Planning the display;
-Sketching the design;
-Using building props;
-Locating lights and shadows for attractiveness;
-Arranging merchandise;
-Placing price signs and descriptive signs.

Formerly, displayers worked either on floor displays or dressed windows. New store design now provides look-through windows so the entire store interior comes into view from the street. Thus, the entire store becomes a display. This has changed the nature of the job considerably.

Recently, specialized groups have developed to make up package displays for seasonable merchandise and these are sent to customers who may have someone in their employ assemble it for display. Occasionally, the display supplier may go from store to store to assemble and set up displays adapting to space available.

Displayers are used for television advertising and also for setting the studio for television programs.

JOB CLUSTER #7
"Arts and Humanities"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$140-$280/wk	$200-$250/wk	$140/wk

Salaries may vary throughout the state and from store to store. You may wish to check a local source for salary information for your area.

HOURS OF WORK
The usual workweek is forty to forty-eight hours. Some places work regular day shift with occasional night work. Others work almost exclusively at night with peaks during the holiday season.

FRINGE BENEFITS
Depending on place and length of employment, you may receive the following:

paid vacation and holidays
retirement plan
medical insurance
life insurance

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Talk to the displayer in a local department store.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

National Association of Display Industries
Hotel Governor Clinton
New York, NY 10001

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Sign writer, hand	970.281-022
Print maker	144.061-014
Layout Artist	141.061-022
Miniature set designer--motion picture	141.061-046

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: DRAFTER

Performs general duties of DRAFTER in all-round drafting, such as laying out location of buildings, planning of arrangements in offices, large rooms, store buildings and factories, and drawing of charts, forms and records. The drafter's task is to convey the designer's ideas to the production workers.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Preference for detailed work	Able to do free-hand drawing	Good eyesight
Good concentration	Able to follow oral and written directions carefully	Good eye-hand coordination
Patient		General good health
Dependable		
Pride in work		
Neat		

YOU SHOULD KNOW THAT

-High school education is essential;
-You may enter the field with physical handicaps provided you have full use of both arms and hands.

YOU MUST BE ABLE TO

-Do free-hand drawings and sketches;
-Use eyes in close work for prolonged periods;
-Sit and work alone for long periods of time;
-Follow both verbal and written directions carefully.

DOT 017.261-026

PREPARATION AND TRAINING:

High school education is essential.

RECOMMENDED HIGH SCHOOL COURSES:

Mechanical Drawing	Free-hand Drawing
Mathematics	Theory of Mechanics
Shop Practice	Physical Science

Training may be obtained by:

-Taking appropriate courses while in high school;
-Enrolling in an apprenticeship program or on-the-job training;
-Enrolling in a technical school. The course "Drafting Technician" is offered at the Billings Vocational-Technical Center, the Butte Vocational-Technical Center, and Northern Montana College.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Some demand is expected for well-qualified high school graduates with high school drafting courses and mathematics, including trigonometry.

As engineering and scientific occupations grow, more drafters will be needed as supporting personnel.

Job prospects are favorable throughout the state.

Approximately nine out of ten drafters are employed by private industry.

The projected opportunities in Montana are good.

OPPORTUNITIES FOR ADVANCEMENT

With high school education, you may start as a tracer. With formal post high school training, you may qualify as junior drafter. You may advance to:

checker, senior drafter, supervisor, designer, chief drafter, detailer.

MORE ABOUT THE JOB:

The drafter creates an instrument of communication. Through the skillful use of the language of lines and symbols, together with the written word, the drafter makes a drawing which communicates the engineer's or architect's thoughts and ideas to the craft workers who will turn them into tangible objects.

In practice, the drafter may be an all-around worker in a particular field such as:

architectural	electrical	electronics
structural	industrial	mechanical
topographical	marine and ships	aeronautical
civil engineering	public utility	title insurance
petroleum	plumbing	commercial

Drafters work from verbal instructions, sketches, and engineering data to produce working drawings. They should know:

-Basic drafting techniques;
-Mathematics from algebra through trigonometry;
-Interpretation of engineering symbols;
-Basic information on dealing with physical sciences.

JOB CLUSTER #4
"Construction"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$1312/mo		$998/mo

An applicant with two years post high school training has a much better chance of employment and rapid salary advancement.

HOURS OF WORK

Normally, a forty-hour workweek is standard. Overtime may be required to meet deadlines.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

paid vacations and holidays	life insurance
medical insurance	sickness and accident insurance
hospitalization insurance	

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs.
You may contact a youth representative at your local Employment Service Office.

ADDITIONAL SOURCES OF INFORMATION:

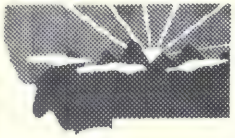
Your school counselor and librarian may also help you find additional information.

American Institute for Design and Drafting
3119 Price Road
Bartlesville, OK 74003

American Federation of Technical Engineers
1126 16th St. NW
Washington, D.C. 20035

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Drafter, cartographic	018.261-010
Technical Illustrator	017.281-034
Drafter, detail	017.261-030
Drafter, automotive design	017.281-022



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: DRAPERY SEAMSTRESS

The DRAPERY SEAMSTRESS, working with material already measured and cut, assembles and sews together drapes.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Patient	Mechanical	Normal health
Attention to detail	Numerical	Good vision (natural or corrected)
Preference for working alone		Good eye-hand coordination
Preference for working with tangible objects		Full use of hands and fingers
		Good color perception

YOU SHOULD KNOW THAT

-Working conditions are rather noisy due to the constant operation of various power sewing machines;
-The demand for the services of the drapery seamstress is greater during periods when there is a great deal of residential building.

YOU MUST BE ABLE TO

-Work for long periods of time while standing or sitting;
-Bend, stoop, and walk around during the work day;
-Concentrate for long periods of time on work which requires precision accuracy;
-Perform simple arithmetic operations correctly;
-Lift and carry material weighing up to twenty-five pounds.

DOT 787.682-018

PREPARATION AND TRAINING:

The drapery seamstress is usually required to have completed at least the eighth grade, and is usually trained on the job. A seamstress can benefit from a complete high school education.

THE COURSE OF STUDY INCLUDES:

High School: Sewing, home economics, arithmetic

On-the-job training: Consists of performing the most simple operations first and advancing to the more difficult with experience.

ADDITIONAL FACTS ABOUT TRAINING:

Experience in sewing in the home, especially on an electric powered sewing machine, may qualify you for employment. Upon finding your first job as a drapery seamstress, you must usually prove that you can work rapidly and accurately to keep the job.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Drapery seamstresses are employed by custom and contract drapery companies and by some department stores in all areas of Montana.

The introduction of some automatic sewing equipment has made it possible for less skilled workers to do operations previously done by skilled workers.

The projected opportunities in Montana indicate there will not be any expansion and very few replacement needs; however, a skilled, interested seamstress could build a business.

OPPORTUNITIES FOR ADVANCEMENT

Opportunities for advancement for most drapery seamstresses are limited.

Advancement usually consists of mastering all aspects of the job and qualifying for top pay as a skilled drapery seamstress. Skilled operators may advance to custom tailors.

MORE ABOUT THE JOB:

The drapery seamstress is a skilled seamstress who produces finished drapes from material which has been previously measured and cut. Drapery seamstresses help provide draperies for homes, offices, hotels and motels, and other drapery demands.

Several operations are involved in producing a complete drapery. The operations are:

-Matching selvages of pieces of material and running the pieces to be used through a sewing machine which stitches the pieces together;
-Blind stitching the sides and bottom hems on a particular machine;
-Sewing the linings and preparing the draperies for tabling;
-Pressing the completed drapery.

In small shops, much of the work is done by hand and the fully qualified drapery seamstress may perform several or all the steps. In larger shops, more machines are used and the seamstress does fewer things.

In addition to machines used, most drapery seamstresses use scissors, thimbles, pins, and measuring sticks in their work.

Some seamstresses also do cutting and measuring regularly in addition to sewing. Some also block draperies and cover cornices.

JOB CLUSTER #10
"Manufacturing"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
37½-40	$150-$210/wk	$170/wk	$150/wk

Some drapery seamstresses charge by the widths of material in the drapes. Salaries may vary throughout the state. You may wish to check a local source for salary information in your area.

HOURS OF WORK

The usual workweek is forty hours, eight to five, Monday through Friday. During rush periods, workers may work Saturday.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

paid vacations and holidays
group insurance
health and welfare plans
worker's compensation benefits

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LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

A local business making draperies could refer you to a drapery seamstress for more information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Carpet Sewer	787.682-014
Knitting-Machine Operator	685.665-014
Sewing-Machine Operator, Regular Equipment (garment)	786.685-030
Tailor	785.261-014

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MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: DRIVER, MILK ROUTE (D.O.T. - DRIVER, SALES ROUTE)

Drives truck over established route to deliver dairy products to customers, mostly in residential areas. Drivers work early in the morning loading their truck with dairy items, such as, eggs, butter, milk, cream, ice cream, cheese, cottage cheese, yogurt and deliver the products.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Dependable	Verbal	Good general health
Tactful	Numerical	Free of communicable disease
Good memory	Clerical	Normal vision and hearing
Honest		Eye-hand coordination
Preference for outdoor work		Able to lift heavy object
Likes routine work		
Desire to serve others		

YOU SHOULD KNOW THAT

-working hours are unusual; most dairy route drivers do the bulk of their work in the early morning between 5:00 and 9:00 a.m.
-some saleswork may be required
-the route driver must call on potential customers, take orders, keep a sales record, and often collect charges and give receipts
-dairies hire part-time help during the summer months because of vacations

YOU MUST BE ABLE TO

-drive a truck and have a valid driver's license
-get along well with your customers when delivering and receiving orders
-learn about various dairy products and recommend various items to customers
-keep simple clerical records and in some cases, receive payment for products
-cover an established route on a strict time schedule

D.O.T. 292.353-010

PREPARATION AND TRAINING:

Most employers require a high school education for employment as a dairy route driver. Some college training in sales, bookkeeping and speech may be helpful, especially to the candidate hoping to advance to better positions.

RECOMMENDED HIGH SCHOOL SUBJECTS:

English	Speech	Sales
Business Math	Driver Education	Business Administration
Bookkeeping		

COURSES OF STUDY AFTER HIGH SCHOOL:

Sales	Human Relations in Business
Business Administration	Public Speaking
Bookkeeping	Consumer Problems
Marketing	Business Law

ADDITIONAL FACTS ABOUT TRAINING:

On-the-job training will include orientation to the various dairy products, familiarizing with the dairy processing operation and some training and techniques of delivery and sales of dairy products. Experience in sales and/or delivery work will be helpful.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities for dairy route drivers exist everywhere in cities and towns of all sizes.
There are more opportunities in large cities.

ADVANCEMENT

Advancement for most route drivers comes in the form of transfers with seniority to preferred routes. With enough experience and training, the dairy route driver can become:

route supervisor	sales manager
salesperson	district manager

MORE ABOUT THE JOB:

Duties of the dairy route driver may include:

-loading or supervising the loading of trucks before starting daily delivery route
-checking load to make sure all items needed are loaded
-making record of items loaded on truck
-driving truck over predetermined delivery route, usually consisting mainly of private residences
-calling on regular customers and delivering products
-selling additional products if the customer requests
-picking up discarded products or empty containers
-preparing and giving the customer a bill for products ordered and received
-may collect payment on bill
-keeping an account of products delivered, bills prepared, money collected
-taking additional orders for next delivery
-calling on new residents to solicit business
-taking orders of new residents, recording them, and quoting prices
-may make deliveries to stores, cafeterias, and restaurants
-after completing delivery route, returns to the plant
-empties leftover products from the truck
-notes quantity of various products delivered
-compares quantity of product sold with bills or money received
-turns in accounts to bookkeeper or route manager
-prepares delivery list for the next day

JOB CLUSTER #12
"Marketing & Distribution"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$215-$270/wk	$235/wk	$215/wk

Salary may be higher in companies where the route driver is paid commissions on additional sales.

HOURS OF WORK

The dairy route driver generally works forty hours a week. They usually work in the morning hours delivering most of the products to homes between 5:00 a.m. and 9:00 a.m. Most route drivers work either five or six days a week. There is little overtime work.

FRINGE BENEFITS

Depending on the length and place of employment, you may receive:

life insurance
pension plan
paid vacations
sick leave
health and medical plan
paid holidays
furnish truck and uniform

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Check with your local dairy for more details.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

RELATED OCCUPATIONS:

JOB TITLE:	D.O.T.#:
Newspaper delivery driver	292.363-010
Lunch truck driver	292.463-010

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: DRY CLEANER

DRY CLEANERS remove spots or stains from all kinds of clothes and fabrics. They may do many kinds of work in a small shop, or specialize in one or two operations in a large cleaning plant.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Thorough	Spatial	Good vision
Honest	Manual dexterity	Physical stamina
Good judgement	Mechanical	Good health
Pride in work		Good color vision

YOU SHOULD KNOW THAT

-There are some hazards from steam, hot irons and poisonous chemicals;
-You must be able to follow instructions, both written and oral.

YOU MUST BE ABLE TO

-Do the same job day after day without losing interest;
-Be on your feet most of the day;
-Work in above average temperatures.

DOT 362.382-014

PREPARATION AND TRAINING:

Most employers prefer to hire high school graduates. Some require high school graduation for trainee positions.

RECOMMENDED HIGH SCHOOL SUBJECTS

Reading	Basic Math
Homemaking	Shop

ADDITIONAL FACTS ABOUT TRAINING

Training is usually on the job. It may last a few months or up to two years, depending on how fast you learn.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

The money spent for drycleaning and laundering continues to increase yearly. Persons and firms in the United States spend an estimated five billion dollars or more each year for drycleaning and laundry services. The anticipated population growth and increased economic development are expected to create a growing demand for drycleaning and laundry services.

OPPORTUNITIES FOR ADVANCEMENT

Advancement opportunities are limited in this industry. Supervisory workers generally reach their positions through advancement from other positions. They may also become owners of their own establishment.

MORE ABOUT THE JOB:

Dry cleaners remove spots and stains from clothing and other fabrics. They must be able to know different kinds of fabrics because they are cleaned in different ways. The dry cleaner chooses the proper solvent, spots the garment and sets controls of dry cleaning machines. In a small shop, he/she may do all steps of the cleaning operation. In large plants, he or she may be one of the specialized workers described below.

The marker examines bundles brought in by route drivers, checking for stains and rips. An identification tag is attached including any special notations or instructions.

The dry cleaner sorts the garments, noting fabric, color, special finishes, combinations of materials and weighs desired amount for each load. He/she prepares the proper solutions for each load.

The spotter takes out hard-to-clean stains. He/she uses soap, water, steam or chemicals to remove the stain.

The tailor may make alterations or repairs when necessary, such as sewing torn seams, attaching loose linings, hemming skirts and sewing buttons.

The presser uses various machines to give the clothes their final finish.

JOB CLUSTER #12
"Personal Services"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$3.85-$4.10/hr	$3.90/hr	$3.85/hr

Earnings are higher for workers in the more highly skilled occupations such as dry-cleaner, spotter and machine washer. Check with a local plant or union for accurate salary information for your area.

HOURS OF WORK

Normally the forty-hour week is the rule. Hours are generally from 7 a.m. to 4 p.m. or from 8 a.m. to 5 p.m.

FRINGE BENEFITS

Depending on place and length of employment, you may receive the following:

-paid vacation
-health insurance
-retirement plan
-paid overtime

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LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

A local cleaner can provide more information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Amalgumated Clothing Workers of America
15 Union Square
New York, NY 10003

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Leather Finisher	363.682-010
Fur Cleaner	362.684-014
Rug Cleaner, machine	361.682-010
Steam Oven Operator	526.382-026

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MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: DUPLICATING MACHINE OPERATOR

OPERATORS of offset duplicating machines are skilled clerical workers who work in all kinds of offices and in the printing and publishing industry. They reproduce single and multi-color copies on specialized machines.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Attention to detail	Mechanical	Good general health
Preference for working alone	Numerical	Good eye-hand coordination
Preference for working with tangible objects	Spatial	Full use of fingers
Willingness to accept responsibility		

YOU SHOULD KNOW THAT

- Working conditions may be fairly noisy because of machine noise;
- Fingers, hands, and arms are subject to injuries from working on machines;
- The skills of the offset duplicating machine operator are easily transferable to other related jobs.

YOU MUST BE ABLE TO

- Keep track of several parts of a machine operating at the same time;
- Start, stop, and regulate the motion of the machine in operation as well as paper, inks, and other material being used;
- Constantly use your fingers to feel papers, rollers, plates, and other parts to insure that all processes are working correctly;
- Follow written and spoken instructions.

DOT 207.682-018

PREPARATION AND TRAINING:

The offset duplicating machine operator must normally possess a high school education or the equivalent. For some jobs, the operator must have had some experience in an office or operation of some kind of machine.

THE COURSE OF STUDY:

High school: A business course with arithmetic, typing, bookkeeping, and other office skills and courses in the graphic arts are recommended.

On-the-job: Usually lasts up to a year and includes all phases of machine operation and care.

Post high school training: Any training in office and printing machines and graphic arts will help.

ADDITIONAL FACTS ABOUT TRAINING:

Part time, summer, and any occasional work as a helper or similar type position in a binder, library graphics department, print shop, or other such establishment will help you qualify.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities for those with training are good and expected to get better in future years.

Opportunities exist in the greater number in the larger cities and towns where large businesses, printing and publishing companies are located.

OPPORTUNITIES FOR ADVANCEMENT

Advancement opportunities in most offices are dependent on the rate workers retire or leave jobs for other reasons, or on the variety of printing processes used.

Offset duplicating machine operators may speed advancement in some cases by taking business courses related to the operation of their office from community colleges, extension courses, and courses offered by employing companies.

MORE ABOUT THE JOB:

Offset duplicating machine operators, whether employed by a business office or by a printing or publishing company, perform precision work in the process of operating offset duplicating machines. The work is much more complex and exacting than that required in the operation of a mimeograph machine.

Although duties of operators in the printing and publishing industry differ somewhat from those performed by clerical workers who operate offset machines, the skills and processes involved in the actual operation of machines are nearly identical. Some of the operations shared by both types of offset machine operators are:

- -Installing master copy of metal printing plate around press cylinder;
- -Using hand tools, locks master in place;
- -Setting various controls by hand for the number of copies, thickness of paper, and other changing requirements;
- -Setting machines to regulate ink flow and speed of machines;
- -Starting machines and operating them for the run, including checking quality of copy produced and feeding and making adjustments when necessary;
- -Cleaning machines following jobs.

Operators in the printing and publishing industry are likely to operate other machines such as:

collators
folding machines
cutting and perforating machines
enlargers
plate burners

Clerical operators who operate offset duplicators are likely to operate multilith or duplicating machines.

JOB CLUSTER #2 - "Business and Office"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	40	$167-$200/wk	$180/wk	$167/wk

Salary greatly depends on whether the operator does only routine office duplicating or works on more complicated projects.

HOURS OF WORK

The normal workweek is forty hours, Monday through Friday. Night, weekend, and overtime work is not usual.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

paid vacations and holidays
group insurance
retirement plan

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LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Education Council of the Graphic Arts Industry Incorporated
1025 15th Street Northwest
Washington, D.C. 20005

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Embossing Machine Operator	208.582-014
Tape Duplicator	194.382-014
Chief Clerk, Print Shop	207.137-010

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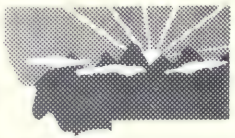

MONTANA VIEW

Vital Information for Education and Work
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Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: ELECTROENCEPHALOGRAPH TECHNICIAN (EEG)

The ELECTROENCEPHALOGRAPH TECHNICIAN (EEG) operates an instrument that records brain waves.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Emotional stability	Intelligence	Normal or corrected vision
Tactful	Verbal	Normal use of hands
Above average alertness	Numerical	Normal visual acuity
Initiative	Spatial	
Good judgment	Ability to preceive detail	

YOU SHOULD KNOW THAT

-You will work in a hospital, or clinic, or a laboratory.

YOU MUST BE ABLE TO

-Reach, lift, and carry objects weighing fifty pounds or more.

DOT 078.362-022

PREPARATION AND TRAINING:

High school graduation is strongly recommended.
The majority of EEG technician applicants take on-the-job training under the supervision of an experienced technologist in an accredited hospital.
However, longer more formalized training programs are recommended.
See your counselor for further information on where these programs are offered.

PROSPECTS AND OPPORTUNITIES:

As advances in electronics continue, opportunities for the EEG technician expand accordingly.

MORE ABOUT THE JOB:

The EEG technician:

- -attaches electrodes which measure impulse frequencies and differences in electrical potential between various parts of the brain to the patient's head in specified areas;
- -observes the patient's behavior and makes appropriate notes on the recording graph;
- -analyzes the finished recording for possible false readings;
- -must be able to recognize abnormal wave patterns;
- -must be thoroughly familiar with his equipment;
- -is responsible for making minor adjustments and repairs in the equipment.

The EEG technician should demonstrate an interest and an aptitude for working with complicated electrical equipment.

JOB CLUSTER #8
"Health"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	40	$10,000 - $22,000/year		

Salaries may vary throughout the state. Check a local source for salary information in your area.

HOURS OF WORK

The forty-hour workweek is normal. However, you may be on call for emergencies.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

- -retirement benefits
- -paid vacation and holidays
- -insurance plan
- -sick leave

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Check with a local hospital for further information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

American Hospital Association
840 North Lakeshore Drive
Chicago, IL 60611

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Physical Therapy Technician	076.224-010
Occupational Therapy Assistant	076.364-010
Radiologic Technologist	078.362-026
X-Ray Technician	199.361-010

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB:

EGG RANCH MANAGER
(POULTRY FARM SUPERVISOR)

The EGG RANCH MANAGER supervises all operations on the egg producing poultry ranch. He/she is responsible for feeding programs, health care, production control, and handling of eggs up to delivery to the processor. He/she also is responsible for keeping all records required for later analysis regarding feeding programs and production control.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Dependable	Clerical	Good general health
Liking for animals	Numerical	Average eye-hand co-ordination
Liking for the outdoors	Manual	
Like routine work		

YOU SHOULD KNOW THAT

- -You will be working under the direction of the ranch owner;
- -You must be able to take and follow orders;
- -You may have responsibility for other ranch employees and must be able to provide leadership.

YOU MUST BE ABLE TO

- -Accept responsibility for care of large flocks and be willing to work extra hours when required;
- -Operate power equipment such as tractors, fork lifts, and scoop shovels;
- -Use basic arithmetic and accurately note records of feeding, egg production, and mortality.

DOT 411.131-010

PREPARATION AND TRAINING:

A high school education is very important.

RECOMMENDED HIGH SCHOOL SUBJECTS:

Agriculture	Ag. Mechanics	General Science
Business Math	General Math	Auto Shop
Metal Shop	Welding	Electricity

COURSE OF STUDY AFTER HIGH SCHOOL:

Any post high school training in agriculture will be helpful. Courses include:

Poultry Production	Breeding and Selection
Feeds and Nutrition	Poultry Diseases
Poultry Management	Record Keeping and Analysis
Marketing	Ag. Mechanics

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Managers are hired to take care of birds in units of 30,000 to 40,000 and each is responsible to the owner or general ranch foreman for total care of the unit.

Jobs are found mainly in rural areas, although some poultry farms are located near the larger cities.

With the increase of large poultry ranchers and increased mechanization, there is a greater need for trained capable managers to supervise flocks.

OPPORTUNITIES FOR ADVANCEMENT

The person with interest and ability in sales work often goes to work in hatcheries selling stock or for veterinary supply houses.

There are opportunities for ownership of your own ranch if you have the experience, land, and money necessary.

MORE ABOUT THE JOB:

The egg ranch manager or poultry farm supervisor is responsible for the day to day production on an egg ranch. He/she may:

- -Select types of feed and do actual feeding;
- -Keep ranch facilities clean, using mechanized cleaning equipment;
- -Be responsible for health care of birds including inspection for possible disease, spray for parasites and fly control measures;
- -Administer specialized drugs or antibodies to control disease problems;
- -Work with veterinarians or state pathology laboratory in determining causes of death and recommending control measures;
- -Keep records of feeding, egg production, death and disease problems for analysis in overall production;
- -Hire egg gatherers or other outside help as needed.

Many owners require the managers to live on the ranch. In most cases, homes and utilities are furnished.

JOB CLUSTER #1
"Agri-Business"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40-48	$735-$885/mo	$785/mo	$735/mo

In addition to base salary, many ranchers offer bonus programs. On an egg ranch, this is usually tied to volume of egg production above a set quota. If the quota is exceeded, the bonus is paid.

HOURS OF WORK

The workweek varies, but more and more managers are working on a forty-hours-a-week basis.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

- free eggs
- vacation
- free housing
- paid utilities
- health insurance

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

U.S. Department of Agriculture
Washington, D.C. 20250

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Chicken Fancier	411.161-014
Animal Breeder	410.161-010
Poultry Breeder	411.161-014
Hatchery Manager	180.167-046

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MONTANA VIEW

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Department of Vocational and Occupational Services
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Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB:

ELECTRICAL SIGN REPAIRER
(D.O.T. - NEON SIGN SERVICER)

ELECTRIC SIGN REPAIRERS maintain and repair hundreds of thousands of neon and illuminated plastic signs that advertise names, products, and businesses. Some workers build, assemble, and install signs.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Able to work alone or with others	Mechanical	Normal health
Initiative	Artistic aptitude would be an asset	Good color vision
Thoroughness	Color perception	Normal hearing
Able to take orders	Some clerical	Physical strength
Dependability		Full use of arms, hands, fingers, and legs
		Manual and finger dexterity

YOU SHOULD KNOW THAT-Electric sign repairers may have to purchase their own hand tools, but employers usually furnish power tools;
-Because most signs are out-of-doors, repairers are exposed to all kinds of weather;
-Repairers make emergency repairs at night, on weekends, and on holidays;
-Repairers often work from scaffolds, catwalks, and ladders, sometimes in awkward or cramped quarters;
-Hazards include electrical shock, burns, and falls from high places;
-Safety equipment and training programs have reduced the frequency of accidents.

YOU MUST BE ABLE TO

-Handle tools and lift transformers, scaffolding, or equipment;
-Be familiar with the National Electric Codes, in some cases, also know local codes.

DOT 824.281-018

PREPARATION AND TRAINING:

Employers prefer trainees who are high school or vocational school graduates, although many sign repairers have less education.

SUGGESTED COURSE OF STUDY INCLUDES:

Mathematics	Blueprint Reading
Science	Electricity

Most electric sign repairers are hired as trainees and learn their trade informally while on the job. Trainees rotate through the various phases of signmaking to obtain a general knowledge of sign fabrication--such as mounting neon tubing; wiring signs; and installing sockets, lamps, time switches, and photoelectric circuits. During each phase, they observe, work with, and receive instructions from experienced workers. At least four years on the job are required to become a fully qualified sign repairer.

Some repairers learn their trade through electricians' apprentice programs, and specialize in signmaking and repairing. These programs generally last from three to five years and include on-the-job training in signmaking and repairing, and classroom instruction in such fields as electrical theory and codes and blueprint reading.

Few repairers acquire their skills through special apprenticeships in sign construction, erection, and servicing. Such programs usually include courses in wiring of signs, installation techniques, and trouble shooting, in addition to courses similar to those taken by electrician apprentices.

PROSPECTS AND OPPORTUNITIES:

JOB AVAILABILITY TREND

Employment of electric sign repairers is expected to increase during the remainder of the 1970's and produce several new jobs annually.

New openings will result from the need to replace workers who retire, or transfer to other fields of work.

New businesses, competition among businesses, and modernization of established enterprises will expand the number of new sign installations.

In Montana, there is not a great number of electric sign repairers and the turnover rate is low.

ADVANCEMENT

Highly skilled repairers may become managers.

Because of their experience in servicing signs and dealing with customers, electric sign repairers sometimes enter the sales field.

Also, repairers with sufficient funds can open their own sign manufacturing or repair shop.

MORE ABOUT THE JOB:

Electric sign repairers may:

-Diagnose trouble in improperly operating signs, make minor repairs such as burned out lamps at sign locations, and overhaul faulty components, such as a motor, in the sign shop;
-Repaint portions of neon tubing to increase readibility of the sign, and paint beams, columns, and other exterior framework;
-Tighten or weld parts loosened in high winds or dented during erection;
-Refer to wiring diagrams and charts in replacing burned out ballasts;
-Replace defective sockets (which usually appear cracked);
-Repair small cracks in the face of the sign.

Sign repairers may also:

-Suggest to customers ways to increase attractiveness and visibility of signs--for example: change color of neon tubing or background, attaching flashers, or raising the height of a sign;
-Fill out reports, noting the date, place, and nature of service calls;
-Sell maintenance contracts to sign owners.

Chief repairers prepare work schedules for other electric sign workers.

JOB CLUSTER #9
"Manufacturing"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	40		Journeyman Worker	$8.85/hour

For salary information in your area of the state, check with your local employment office or with the appropriate local union office.

Apprentice rates usually start at about half the skilled repairer's hourly rate and increase every six months.

HOURS OF WORK
Most electric sign repairers work an eight hour, five day week. However, they do make emergency repairs at night, on weekends, and on holidays.

FRINGE BENEFITS
Depending on the length and place of employment, an electric sign repairer may receive:

Premium pay for overtime	Paid Holidays
In some cities, premium pay for work at heights in excess of 30 ft.	Life, health, and accident insurance
	Retirement Plan

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Inquiries should be directed to local sign manufacturing or service shops, or locals of the International Brotherhood of Electrical Workers.

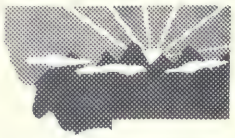
ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

National Electric Sign Association
2625 Butterfield Road
Oak Brook, Illinois 60521

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Electrician (any ind.)	824.261-010
Electrician Apprentice	824.261-014



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: ELECTRICAL ENGINEER

The ELECTRICAL ENGINEER plans, designs and oversees the manufacture and operation of various kinds of electrical and electronic equipment. Because the field is so broad, they usually will specialize in one area such as communications, electronics or power.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Dependable	Mechanical	Good general health
Alert	Numerical	Normal vision and hearing
Thorough	Finger dexterity	Eye-hand coordination
Accurate	Verbal	Ability to lift some heavy objects
Ability to work with others		Ability to work sitting and standing
Ability to assume responsibility		

YOU SHOULD KNOW THAT

- -Electrical engineering is the largest and most rapidly growing of the engineering fields;
- -Most electrical engineers work for private industry, although there are some openings in government work and education;
- -Most engineers specialize in one area such as communications, computers, or aerospace systems;
- -The usual minimum requirement is a bachelor's degree;

YOU MUST BE ABLE TO

- -Learn, absorb, and apply great amounts of scientific and technical knowledge;
- -Assume the responsibility for making important decisions;
- -Perform a variety of duties effectively and efficiently;
- -Work well with others, including firm management personnel, co-workers, and other professional colleagues.

DOT 003.061-010

PREPARATION AND TRAINING:

The normal education requirement is a bachelor's degree in electrical engineering from an approved college or university. For some positions, particularly those requiring supervisory work and decision making duties, advance degrees such as the masters or doctorate may be required by the employer.

RECOMMENDED HIGH SCHOOL SUBJECTS

The high school student should pursue a college preparatory course including:

physics	chemistry	electronics
drafting	English	

RECOMMENDED COLLEGE SUBJECTS

electronics	electrical engineering	English
chemistry	mathematics	physics
electricity	engineering graphics	social studies
		elementary mechanics

ADDITIONAL FACTS ABOUT TRAINING

You may want to check the programs offered at Montana College of Mineral Science and Technology in Butte or Montana State University in Bozeman.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities are best in private industry; with electronic equipment manufacturers and utilities companies.

Opportunities are generally best in large urban areas where most industries are located.

There is not a great demand for electrical engineers in Montana.

ADVANCEMENT

Advancement may come in several ways:

salary increases	lecturing at colleges
promotions	supervisory and managerial work
contributing to professional journals	consultant work with industry and government

MORE ABOUT THE JOB:

The electrical engineer:

- -Is concerned with the design, development and production of electrical equipment;
- -Is concerned with the use of the above equipment in the generation, transmission and distribution of electricity;
- -Works to develop electric motors, generators, communications equipment, electronic equipment, electrical appliances, aerospace equipment;
- -Usually specializes in one area of the broad field of electricity and electronics;
- -May work for a private industry, usually a manufacturing corporation, or for a governmental agency or educational institution;
- -Deals with the practical application of electricity to everday life;
- -Uses a variety of complex electrical machines and equipment as well as simple hand and power tools;
- -Usually starts employment as a junior engineer and performs fairly routine tasks such as preparing equipment for testing, carrying out tests, and recording results.

Areas of specialization include:

communications	illumination	electrical power
electronics	aerospace activities	equipment design
manufacturing	construction	instruction

JOB CLUSTER #4
"Construction"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$10.75/hour		

The salary for an electrical engineer is dependent on several variables, including type of employer, nature of duties, experience, and degrees held.

HOURS OF WORK

The electrical engineer usually works an eight-hour day, five days a week. There is little overtime or weekend work except when a major project is underway.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

retirement plan	life insurance
health and medical coverage	sick leave
paid vacations and holidays	compensating time off

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

The local office of the power company may be able to provide you with information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Institute of Electrical and Electronic Engineers
345 East 47th Street
New York NY 10017

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Electrical Technician	003.161-010
Agricultural-Engineering Technician	013.161-010
Field Engineer, Specialist (petrol. Production)	010.261-010
Electronic Technician	003.161-014

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: ELECTRICAL REPAIRER

The ELECTRICAL REPAIRER, sometimes called the maintenance electrician, uses preventative systems and corrective measures; and when malfunctions do occur, they perform the necessary repairs.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Reliable	Mechanical	Good general health
Alert	Agile	Good vision and hearing (natural or corrected)
Responsible	Numerical	Better or average eye-hand coordination
Decision making capacity		Good hand and finger manipulation
Adaptable to many situations		Good color vision
		Full use of legs and feet

YOU SHOULD KNOW THAT

- -Electrical repair people must be prepared to learn new techniques and concepts related to their trade all through their career;
- -This is a rapidly developing field;
- -Those who are color blind should not consider a career as an electrical repairer;
- -You must complete an apprenticeship program before you can become a fully qualified journeyman electrician.

YOU MUST BE ABLE TO

- -Analyze problems in electrical systems requiring considerable knowledge of possible trouble causes;
- -Work in high places without undue concern or fear;
- -Use a variety of power and hand tools as well as precision measuring instruments;
- -Perform work requiring average or better capacity for physical agility.

829.281-014

PREPARATION AND TRAINING:

You should have a high school education or its equivalent. You can go into an apprenticeship program or on-the-job training program.

RECOMMENDED HIGH SCHOOL COURSES

English, mathematics, shop, electricity, sciences

Courses for an electrical technician are offered at the Butte Vocational Technical Center and Northern Montana College.

Electronics engineering technician courses are offered at Miles Community College, Northern Montana College, Missoula Technical Center and at the Great Falls Vocational Technical Center.

Those who work at electrical specialties in the armed services may receive some apprenticeship credit.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Electrical repair people are employed in large numbers in all kinds of plants, offices, institutions and other buildings serviced by electrical systems.

Future prospects are for an increased demand for electrical repair people.

OPPORTUNITIES FOR ADVANCEMENT

A few repair people may go on to become plant electrical superintendents and plant maintenance superintendents.

A well qualified electrical repairer may advance to a job of supervisor.

In addition to these promotions, good training in this field qualifies the worker for many high paying jobs in related areas.

MORE ABOUT THE JOB:

Electrical repair people are responsible for the maintenance and repair of all kinds of electrical equipment. They also install new equipment and systems and they modify outdated equipment.

The repairer's day consists of tasks involving preventive maintenance and repair. When breakdowns occur and repairs are needed, the electrical repairer must locate the source of the trouble and take steps to remedy it. As a preventive measure, the repairer may check wiring and other electrical parts near the one being repaired.

In the preventive maintenance part of the work, the repairer uses several types of test equipment such as test lamps, ammeters, oscilloscopes and volt-ohm meters.

In much of the work, the repairer uses diagrams and blueprints. Some duties are to make recommendations and design safety features for systems and equipment which is improperly designed or installed.

JOB CLUSTER #4
"Construction"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	40	$10.20/hour		

Salaries may vary widely depending on the type of job and whether or not it is union. Check your union for local salary and apprenticeship program information.

HOURS OF WORK
The nornal workweek consists of forty hours, Monday through Friday. Overtime and weekend work varies from place to place depending on the availability or shortage of repair people.

FRINGE BENEFITS
Depending on length and place of employment, you may receive:

- paid vacations and holidays
- retirement plan
- sick leave
- health and welfare plan
- premium pay for overtime

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Your local power company office should be able to provide further information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

International Brotherhood of Electrical Workers
1200 15th Street, N.W.
Washington, D.C. 20036

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Electric sign Repairer	824.281-018
Radio mechanic	823.281-014

D.O.T. Fourth Edition, page 844

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: ELECTRICIAN

An ELECTRICIAN plans the layout, installs and repairs wiring, electrical fixtures, apparatus and control equipment. Electricians also test electrical fixtures and wiring used in electrical systems in all types of structures.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Ability to take responsibility	Numerical	Normally good health
Thoroughness		Normal vision and hearing (natural or corrected)
Dependability		Above average hand and finger dexterity
Ability to work alone		Color perception
Initiative		

YOU SHOULD KNOW THAT

-beginners start as apprentices at approximately 50 of the journeyman's wage;
-nearly all electricians must belong to a union (this includes apprentices also);
-construction electricians and apprentices are expected to supply their own hand tools;
-hazards include falls from ladders or scaffolds, cuts from sharp tools, and burns or shocks from electricity.

YOU MUST BE ABLE TO

-work from high ladders, scaffolding or in cramped quarters when necessary;
-solve various problems which occur on the job without the help of formal plans or aid from others;
-ability to reason and improvise as necessary;
-follow safety rules closely.

D.O.T. 824.261-010

PREPARATION AND TRAINING:

Students interested in preparing for this trade:

-should be high school graduates to qualify for an apprenticeship program;
-should train for a journeyman's status as an apprentice for approximately four years;
-will find formal training in a community college or vocational technical center will increase chances that an applicant will be accepted into an apprentice program by the responsible union.

RECOMMENDED HIGH SCHOOL SUBJECTS: Mathematics, Physics, Drafting, Mechanical Drawing, Shop classes

ADDITIONAL FACTS ABOUT TRAINING

Those who wish to become electricians must pass aptitude tests to qualify for apprenticeship programs and pass a test for certification as a journeyman electrician. Apprenticeship programs include classroom training as well as on-the-job training.

A formal apprenticeship program is highly preferable to any other training for this job.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Long-run prospects for electricians appear good.
Because of the good pay, competition for apprenticeships is keen.
Opportunities are best for those with complete educations including some college or vocational technical training.
Opportunities are concentrated in urban areas, especially expanding ones.

ADVANCEMENT

Journeyman electricians may become supervisors and estimators after working for a contractor for several years.
Some electricians with good business skill and complete knowledge start their own contracting firms.

MORE ABOUT THE JOB:

Construction electricians install many types of switches, circuits, controls, circuit breakers, wires, lights, signal devices and other electrical components following blueprints and specifications. If there is no electrical drawing, the electrician terminates the incoming electrical service into a central fuse box and installs exterior circuits and outlets according to the amount of electrical current expected to be used in various sections of the building. The electrician installs fuses or circuit breakers of the proper reading to prevent overloading. The electrician must know and follow national electrical code regulations and must fulfill state, county and municipal regulations.

In installing wiring, the electrician uses a mechanical or hydraulic bender to shape conduit and pulls insulated wires or cables through the conduit. The electrician connects the ends of the wires or cables to circuit breakers, switch gear motors, transformers or other components. When operations are completed, the electrician tests the electrical circuits to make sure that the entire system is properly grounded, the connections properly made and that circuits do not carry excessive current. Wires are spliced (joined) by soldering or other methods.

Electricians furnish their own hand tools, such as pliers, screw drivers, brace and bits, knives and hacksaws. The employer furnishes test meters, heavier tools and equipment such as pipe threaders, conduit benders, chain hoists, electrical drills, power fasteners and ladders.

JOB CLUSTER #4

"Construction"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
37½-40	$10.33/hr Journeyman Scale		

Salaries are based on current union contracts. Pay is usually higher in large cities but living costs may also be higher. Check your union for local salary and apprenticeship program information.

HOURS OF WORK

Normal work week is forty hours. Most work is performed during the day. Overtime is rare.

FRINGE BENEFITS

Depending on place and length of employment:

health and welfare plans
paid vacations and holidays
pension plans
sick leave

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

For further information, contact your local electrical contractor or labor union.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

The National Joint Apprenticeship and Training
Committee for the Electrical Industry
1730 Rhode Island Ave., N.W.
Washington, D. C. 20036

International Brotherhood of
Electrical Workers
1125 15th Street, N.W.
Washington, D. C. 20005

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Neon-sign servicer	824.281-018
Electric-distribution checker (const.;light,heat & power)	824.281-014
Electrician, repair	829.281-014

D.O.T. Fourth Edition, page 838

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: ELECTROCARDIOGRAPH TECHNICIAN (EKG)

The ELECTROCARDIOGRAPH (EKG) TECHNICIAN operates the electrocardiograph, a complex piece of medical technology which records the electrical potential of the patient's heart muscles. Following the test, the results are interpreted by a qualified physician or heart specialist (cardiologist).

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Emotional stability	Intelligence	Vision (normal or corrected)
Tackfulness	Verbal	
Cooperative	Numerical	Normal use of both hands
Above average alertness	Ability to perceive detail	Normal visual acuity
Initiative		Able to reach, lift and carry
Good judgment		

YOU SHOULD KNOW THAT

You cannot qualify if:

-you have a police record for any criminal (as opposed to civil, i.e. minor traffic) offense;
-you have an active communicable disease.

YOU MUST BE ABLE TO

-work accurately with knowledge that an error may have serious consequences for a patient;
-work tactfully and pleasantly with patients who are seriously ill or emotionally upset;
-perform well-standardized procedures with a minimum of supervision.

DOT 078.362-018

PREPARATION AND TRAINING:

There is no formal training program required for employment as an electrocardiogram technician. The number of openings is limited to one for most hospitals and clinics. Individual training programs are offered when an opening occurs. High school graduation, including the physical sciences, is essential as a prerequisite to on-the-job training. This training may be given by a cardiologist (a licensed physician specializing in heart ailments) or a licensed medical technologist in charge of a laboratory and the medical assistants working in it.

THE COURSE OF STUDY INCLUDES:

-Operation of an electrocardiograph;
-recognition of abnormal wave patterns;
-recognition of machine malfunction.

ADDITIONAL FACTS ABOUT TRAINING:

General good health and agreeable manner and a fresh tidy appearance are qualities essential to selection as a trainee. Emotional stability and dependability are character traits also checked by most employers.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITIES AND DISTRIBUTION

Opportunities are limited for the electrocardiogram technician because most hospitals employ only one.

OPPORTUNITIES FOR ADVANCEMENT

Advancement nearly always requires additional training. There is no formal line of promotion. In many cases, this job is static.

MORE ABOUT THE JOB:

The EKG technician cares for and operates electrocardiograph equipment.

In hospitals, duties include:

-preparing for electrocardiograph tests;
-instructing patients in procedures;
-connecting leads from electrocardiograph to electrodes on patient;
-manipulating switches on equipment to administer tests;
-gives or forwards tracings to doctor;
-places graphs in patient's records;
-files records;
-keeps machinery in working order;
-may develop film.

The EKG technician may perform related clerical duties or be trained for other medical laboratory tests if not needed full time for electrocardiograph work.

Some hospitals train its nursing personnel to do the EKG work.

JOB CLUSTER #8
"Health"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	40	$8,500 - $15,200/year		

Because of varying rates of pay throughout Montana, specific information on salaries may be obtained at your nearby employment office or hospital.

HOURS OF WORK

The forty-hour workweek is normal. Work is usually done during the day hours, but you may be on call for emergencies at any hour.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

-health insurance
-retirement plan
-paid holidays
-paid vacation

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs.
You may contact a youth representative at your local Employment Service Office.

Check at your local hospital for an EKG Technician in order to [illegible] more details.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information.

American Hospital Association
840 North Lake Shore Drive
Chicago, Illinois 60611

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Audiometrist	078.362-010
Electroencephalograph Technician	078.362-022
X-ray Technician	199.361-010

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: EMBALMER

Working in a funeral home establishment, the EMBALMER prepares bodies for internment in conformity with legal requirements.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Empathy	Good memory	Neat appearance
Tact	Sense of form	Extreme cleanliness
Emotionally stable	Finger dexterity	Good general health
Sincere	Artistic ability	Full use of arms and fingers
Dependable	Scientific aptitudes	Good vision
Patient		Moderate physical strength
Clean		
Neat appearance		
Friendly and compassionate		

YOU SHOULD KNOW THAT

- -In a large establishment, the embalmer has less contact with the family of the deceased than does the funeral director, but he/she still must know how to meet them under emotional circumstances;
- -Funeral services as a career offers excellent opportunities for a young man or a young woman to serve people and at the same time to earn a comfortable living;
- -The handling of dead bodies, including those that have been defaced, deformed, or mutilated by an accident, may be distasteful to some.

YOU MUST BE ABLE TO

- -Organize and handle numerous details;
- -Win and retain the confidence of people;
- -Be ready to serve at any moment in every twenty-four hour period of the day;
- -Do good restorative work in cosmetology;
- -Lift bodies and carry heavy equipment.

DOT 338.371-014

PREPARATION AND TRAINING:

Must be a high school graduate. Helpful courses include English, public speaking, science and chemistry.

Must have two years of college to prep for embalming school (60 credits). Subjects to take are accounting, bacteriology, pathology, chemistry, anatomy and physiology.

Must pass the Montana State Board of Examination and one year apprenticeship to work in Montana.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Little change in the employment of funeral directors and embalmers is expected through the mid-1980's. Nevertheless, many openings will arise each year to replace experienced workers who retire, die or transfer to other occupations.

OPPORTUNITIES FOR ADVANCEMENT

Advancement is usually in the form of pay raises or moving into a managerial position.

MORE ABOUT THE JOB:

Each state has its own laws for licensing and maintaining basic public health standards.

Duties of the embalmer include:

-Washing and drying the body using germicidal soap;
-Inserting convex celluloid or cotton between eyeball and eyelid to prevent sinking and slipping of eyeballs;
-Pressing diaphragm to evacuate air from lungs;
-Making incisions in arm or thigh, inserting pump tube into arteries and start the pump that replaces blood with embalming fluid;
-Closes the incision using needle and suture;
-Applies cosmetics to impart lifelike appearances;
-Dresses the body and places it in the casket.

JOB CLUSTER #13
"Personal Services"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$11,000 - $17,000/year		

Check local funeral home for specific information on salaries.

HOURS OF WORK

The forty hour week is normal. An owner has longer hours.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

life insurance
paid vacations
health insurance
sick leave

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

The local funeral parlor can provide you with further information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

National Selected Morticians
1616 Central Street
Evanston, Illinois 60201

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Wig dresser	332.361-010
Barber	330.371-010
Cosmetologist	332.271-010

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: ESCROW OFFICER

The ESCROW OFFICER takes information from buyers and sellers of property and completes the escrow process of transferring and borrowing on real estate. The escrow officer handles all the funds and documents for the transfer.

REQUIREMENTS AND QUALIFICATIONS:

	Aptitudes	Physical Abilities
Neat appearance	Numerical	Good health
Ability to get along with people	Clerical	Normal vision (natural or corrected)
Honest	Intelligent	Full use of hands and arms
Precise		
Accurate		

YOU SHOULD KNOW THAT

-Ability to keep accurate records is a must.
-You will be expected to operate an adding machine and typewriter.

YOU MUST BE ABLE TO

-Learn the purpose and use of different land transfer documents such as trust deeds;
-Maintain good relations with customers;
-Keep accurate records of the business.

DOT 119.367-010

PREPARATION AND TRAINING:

High school graduation is the minimum educational requirement for an escrow officer. Many employers prefer some college training in business courses.

RECOMMENDED HIGH SCHOOL SUBJECTS:

Business	Arithmetic
Typing	English

COURSE OF STUDY AFTER HIGH SCHOOL:

Courses in real estate, business law, English, basic math, and speech are recommended.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Qualified escrow officers are in demand. Experienced officers are in short supply and a person competent in this field need never remain out of work.

Escrow officers are employed by title companies, banks, savings and loan associations, and independent escrow companies.

Escrow officers are found in cities of all sizes, although most job opportunities exist in the larger metropolitan areas.

OPPORTUNITIES FOR ADVANCEMENT

Many workers start as title secretaries for title companies or as escrow secretaries.

Promotion is made to escrow officers in large companies, to chief escrow officer or office manager.

There are relatively few openings for these higher level jobs.

There are also opportunities to become a real estate loan officer, appraiser, or trust officer in title companies or lending institutions.

MORE ABOUT THE JOB:

In a transfer of real property from seller to buyer, there is a time lapse before clear title to the property can be established. Both parties find it desirable to have a responsible third party hold the funds and documents until the conditions of the sale have been met. The individual who acts in this capacity is often called the escrow holder or officer.

An escrow officer should be able to read and understand the agreements and most important that part that pertains to the conditions under which the documents are to be delivered to the buyer.

He/she must understand what they are being asked to do and, of course, not agree to take on responsibilities his/her employer will not accept.

He/she should know what the following documents are and their use:

- Warranty Deed
- Quitclaim Deed
- Stock Certificates and Assignments
- Bills of Sale
- Abstract of Title
- Title Insurance

He/she should know how to compute interest and what an amortization schedule is and how to read it.

He/she must be able to keep complete and accurate records.

JOB CLUSTER #2
"Business and Office"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	40	$690-$1200/mo	$780-$950/mo	$690/mo

Salaries may vary throughout the state. A local source should be checked for accurate salary information for your area.

HOURS OF WORK

The escrow officer works 7½ or 8 hours a day, five days a week. Officers at independent agencies may work overtime during busy periods.

FRINGE BENEFITS

Depending on the length and place of employment, some or all of the following may be available:

- paid vacations
- life insurance
- health insurance
- retirement plan

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

A local bank can provide further information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Disbursement Clerk (finan. inst.)	211.362-010
City Planning Aide (profess. & kin.)	199.364-010
Correspondence-Review Clerk	209.367-018
Records Custodian (banking)	206.387-026

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MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: EXTERMINATOR (PEST CONTROLLERS)

PEST CONTROL WORKERS are employed by licensed pest control operators. Pest control workers perform exterminating work in homes, business offices, factories, and other structures.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Neat appearance	Numerical	Normal vision (natural or corrected)
Good judgement	Mechanical	Average strength and agility
Honest	Clerical	Full use of arms, hands and legs
Able to deal with people	Verbal	Freedom from back ailments

YOU SHOULD KNOW THAT

- -Considerable knowledges of techniques of exterminating pests, laws and other material related to pest control is necessary in order to be successful as a pest control worker;
- -Work for the qualified pest control worker is steady and expanding;
- -Though rather strenuous physically, pest control work is relatively safe due to strict adherence to safety regulations.

YOU MUST BE ABLE TO

- -Work indoors and out;
- -Work in cramped and awkward positions on occasion;
- -Work in dirty, dusty surroundings;
- -Do heavy work, including pushing, pulling and carrying weights up to 75 pounds;
- -Meet customers easily, conveying a good impression of your company and influence customers to buy your company's service;
- -Work from ladders.

DOT - 389.684-010

PREPARATION AND TRAINING:

There are no specific educational requirements for the pest control worker. A high school education or its equivalent is recommended. On-the-job training is important and continuous.

THE COURSE OF STUDY INCLUDES

High School	English, arithmethic and shop courses are recommended. Biology and chemistry are also of value.
On-the-Job Training	Consists of learning by doing plus study of laws and procedures necessary for proper pest control operation. You will be paid the beginning wage while training.

ADDITIONAL FACTS ABOUT TRAINING

Employers strongly prefer high school graduates who express career interest in pest control.

SPECIAL ENTRY REQUIREMENTS

In most cases, you must be bonded.
You must have a valid driver's license.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities with pest control companies exist throughout the nation; however, there is not a great demand in Montana.

The industry is fairly small but relatively high rates of turnover create openings.

Pest control workers are busiest during the summer months.

ADVANCEMENT

Pest control workers who are licensed and work for large companies may advance to jobs as supervisor or crew leader. With small companies of less than ten employees, promotional opportunities are few and limited.

MORE ABOUT THE JOB:

Pest control personnel at all levels of responsibility provide the necessary public health function of keeping our communities free of pests and infections which affect buildings and natural resources. Pest control workers--depending on the type of license they hold and the nature of their community--may perform one or more of the following services:

- -Fumigating;
- -Weed control;
- -Wood destroying organism control
- -General pest control.
- -Control of poisonous plants, fungi, insects, rodents and other animals and plants;

Duties of the beginning worker are likely to include the following:

- -Digging;
- -Handling supplies;
- -Clearing pests' breeding places.
- -Mixing cement and plaster;
- -Applying pesticides under close supervision;
- -Preparation of buildings for fumigation;

Workers may be required to purchase hand tools such as saws, hammers and pliers which they use regularly.

Beginning workers are encouraged to learn the concepts and facts necessary to obtain licenses as field representatives within a short time after employment.

JOB CLUSTER #1
"Agri-Business"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$3.50-$9.00/hr	$4.25-$6.00/hr	$3.50/hr

Salaries may vary throughout the state. Check a local service for accurate information.

HOURS OF WORK

Hours of work vary from forty to forty-eight or the basic workweek. Overtime is frequent during the summer months.

FRINGE BENEFITS

Depending on the place and length of employment, you may receive the following:

- paid vacations
- sick leave
- profit sharing
- laundry service

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

A local pest control service can provide additional information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

National Pest Control Association, Inc.
250 West Jersey Street
Elizabeth, N.J. 07207

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Grounds Keeper	406.687-010
Tree Surgeon Helper	408.684-018
Janitor	382.664-010

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB:

FARM AND GARDEN QUIPMENT SALESPERSON
(D.O.T. - SALES REP., FARM & GARDEN EQUIPMENT)

The FARM AND GARDEN EQUIPMENT SALESPERSON sells farm and garden equipment to farmers, gardeners, and others. Equipment may include tractors, harvesters, combines, loaders, plows, lawn mowers, and poultry and dairy equipment. The sales person usually specializes in equipment of one area of agriculture.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Cheerful	Verbal	Good general health
Dependable	Numerical	Good speech
Aggressive	Clerical	Normal vision and hearing
Poised	Mechanical	Eye-hand coordination
Tactful		Color perception
Good Memory		

YOU SHOULD KNOW THAT

- You may work indoors selling products or may spend most of your time on the road visiting farmers, analyzing their needs, and recommending the best equipment, or you may divide your time in both areas;
- Your employer will probably send you to a training school sponsored by a farm equipment manufacturer.

YOU MUST BE ABLE TO

- Meet a customer, summarize the need, and determine the best product for the job;
- Sell the customer on your product over those of a competitor;
- Learn about a variety of farm equipment and how to best use them;
- Learn to operate the various machines you sell so you can show the buyer how to run them.

DOT 272.357-014

PREPARATION AND TRAINING:

A high school education is generally required by most employers, and many now prefer some college training in sales and agriculture.

RECOMMENDED HIGH SCHOOL COURSES:

Vocational Agriculture	Bookkeeping
English	Mathematics
Speech	Machine Shop
Sales	Business Management

COURSE OF STUDY AFTER HIGH SCHOOL:

Farm Machinery	Bookkeeping
Agriculture Field Practices	Sales
Marketing	Business Math
Farm Tractors	Business Law
Consumer Problems	Speech

ADDITIONAL FACTS ABOUT TRAINING:

Most manufacturing firms provide training schools in the use of farm equipment. Upon employment, you will receive some on-the-job training, usually in the form of supervised instruction in the use of the various products you sell and crop practices in the area. Post high school training is beneficial to rapid advancement. When available, a vocational course in Agricultural Mechanics and Supplies is recommended. At this time, the Helena Vocational Technical Center offers a course in Agri-Mechanics. A farm background is very helpful.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

There is a need for farm and garden equipment sales people over the entire state.

Many work out of larger cities and travel into rural areas to contact farmers.

OPPORTUNITIES FOR ADVANCEMENT:

Advancement opportunities usually come in the form of bonuses and commissions for equipment that they sell.

A salesperson with supervisory qualities may advance to district or area sales supervisor.

MORE ABOUT THE JOB:

Farm equipment sales people must have a knowledge of agricultural practices and equipment and have a sales aptitude. Sales may be made entirely in a store, on the road, or both. They will sell equipment such as tractors, harvesters, combines, sprayers, tillers, cultivators, lawn mowers, plows, poultry and dairy equipment. Knowledge of how to operate and demonstrate equipment is important to the potential buyer.

The salesperson may:

- -Visit the farmer on site;
- -Analyze the farmer's needs;
- -Determine which machine would be best based on the customer's needs and financial assets;
- -Recommend a product to the customer;
- -Demonstrate how the machine operates, and if necessary, bring the machine out to the farm and operate it;
- -Quote performance information and price;
- -If the farmer doesn't want the product, recommend another machine which can do the job;
- -If necessary, make reference to another dealer;
- -If the farmer decides to purchase, rent, or lease the machine, draw up necessary arrangements;
- -Write the invoice, receive payments, cash, check, down payment, or arrange for full payments in installments;
- -Issue a receipt to the customer;
- -Fill out warranty or guarantee forms;
- -If necessary, instruct the farmer in operation of the product purchased;
- -Keep an account of all transactions made;
- -Make follow-up or service calls.

JOB CLUSTER #12
"Marketing and Distribution"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	45-50			

Most farm and garden equipment sales people are paid on a salary commission basis. A good salesperson with many customers can make up to $25,000 annually.

HOURS OF WORK

The hours of work vary widely, but usually the salesperson averages about 45 hours per week. If a big promotion sale is near, evenings or weekends may be spent on the road talking with the customers and arranging a sale. The farm and garden equipment salesperson is pretty much their own boss and can work more or less than forty hours weekly, depending on initiative.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

Retirement plan	Profit sharing	Holidays
Life insurance	Furnished car	Vacations
Health plan	Expense account	

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

A local farm and garden equipment dealer can provide you with further information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Sales and Marketing Executive International
630 Third Avenue
New York, New York 10017

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Real Estate Sales Agent	250.357-018
Dairy Supplies Sales Representative	274.357-030
Automobile Salesperson	273.353-010
Pest Control Worker	408.381-010
Demonstrator	297.354-010

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB:

FARM MACHINE OPERATOR
(D.O.T. - FARM MACHINE OPERATOR)

The FARM MACHINE OPERATOR runs and does field maintenance on a wide variety of machinery including tillage, planting, cultivating, harvesting, and processing equipment. An operator may work for one rancher and operate many kinds of equipment on many different crops or specialize.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Reliable	Mechanical	Good general health
Patient	Numerical	Eye-hand-foot coordination
Initiative		Normal vision (natural or corrected)
Pride in workmanship		Physical stamina
Liking of outdoors		No allergy problems

YOU SHOULD KNOW THAT

-You should have a preference for working with machinery and equipment;
-If you have asthma or hay fever, you should not consider this job;
-Independent judgement and action is a very important part of the job;
-You should enjoy working with the soil;
-Jobs are seasonal and weather may force work stoppage.

YOU MUST BE ABLE TO

-Work in all kinds of weather, including heat, cold, wind, and dust;
-Stand for long periods, stoop, reach, lift, and climb;
-Adapt to routine repetitive work;
-Follow instructions;
-Read and understand operator's manuals and repair manuals.

DOT 409.683-010

PREPARATION AND TRAINING:

High school graduation is preferred as is some training in agriculture.

RECOMMENDED HIGH SCHOOL SUBJECTS:

Auto Mechanics	Wood Shop	Basic Record Keeping
Metal Shop	Speech	
Reading	Agricultural Mechanics	
Welding	Ag Science	
Electricity	Shop or Applied Math	

COURSE OF STUDY AFTER HIGH SCHOOL:

Field Practices	Farm Tractors	Ag Mechanics
Farm Machinery	Welding	Farm Construction
Farm Electrification	Farm Power	Farm Buildings and Equipment
Irrigation and Drainage	Ag Math	Record Keeping

ADDITIONAL FACTS ABOUT TRAINING

Farmers train their employees for specific machinery, but you need a general background in equipment operation before you will be considered. Length of training depends on the individual and the type of machinery being operated.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

With increased farm mechanization, the need for trained, qualified farm machine operators is growing.

Salaries in this field have improved because of the increased complexity of machines and greater skills required of operators.

There is a shortage of machine operators in most areas during peak harvest times so the worker who is able to master several kinds of equipment may work almost year round.

Jobs are found in rural areas of the state.

OPPORTUNITIES FOR ADVANCEMENT

Qualified operators may move into maintenance work.

MORE ABOUT THE JOB:

The farm machine operator may run a wide variety of machinery including:

wheel tractor	tomato harvester	rotary plow
combine	cultivator	crawl tractor
bean harvester	subsoiler	cotton picker
disc	fertilizing equipment	land planes

Some of the equipment is self-propelled and some is towed or pushed by a tractor.

The operator must know how to mount and transport the equipment to the field, make proper adjustments, and make field repairs in addition to running the machine.

The duties of the farm machine operator on a ranch might include:

-Clearing land of brush and undergrowth by means of front-mounted rakes and blades;
-Leveling land with scrapers and land planes to prevent erosion and to make furrow-type irrigation possible;
-Preparing land for planting using subsoilers, land chisels, single or multiple bottom plows, and disc harrows;
-Sowing seeds and planting, using a variety of specialized attachments;
-Cultivating, using a spring cultivator or rototiller;
-Applying fertilizer, sprays, dusts, and fumigants from tractor-drawn tanks with power driven pumps;
-Harvesting, using a variety of machines specially designed for the crop being harvested.

JOB CLUSTER #1
"Agri-Business and Natural Resources"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	20-70	$700-$1019/mo		$700/mo

Salaries may vary widely according to the type of crop being harvested and the complexity of equipment.

HOURS OF WORK
Hours of work vary with the seasons. The operator who works for a rancher year round may work a short week in off seasons and up to seventy hours during harvest weeks. The worker who follows the crops can work long hours much of the year.

FRINGE BENEFITS
Benefits vary widely. The full-time ranch employee may get:

vacation	transportation
health insurance	free housing

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

A local farmer, local farm equipment dealers, and independent service shops may be able to provide information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Farm Equipment Institute
850 Wrigley Building N.
410 North Michigan Avenue
Chicago, Illinois 60611

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Field Hauler	409.683-014
Heavy-Equipment Operator	859.683-010
Greenskeeper	406.137-010

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: FARM REAL ESTATE SALESPERSON

The FARM REAL ESTATE SALESPERSON is instrumental in bringing buyer and seller together in all farm land sales. His/her job requires the skills and training of a regular real estate salesperson, but also a thorough background in agriculture.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Mature	Verbal	Average Health
Neat	Numerical	Good vision and hearing
Emotionally stable	Clerical	(natural or corrected)
Enthusiastic		
Tactful		
Integrity		

YOU SHOULD KNOW THAT

- -College training in real estate, business administration, economics, and agriculture is becoming increasingly necessary unless you have extensive experience in agriculture;
- -You may handle non-agricultural transactions;
- -You may be required to drive over rough terrain in a four-wheel drive vehicle or cover large areas on foot;
- -Farm real estate sales have seasonal fluctuations.

YOU MUST BE ABLE TO: Drive an automobile and provide a comfortable late-model car;

- -Answer questions about zoning, tax rates, soil conditions, water access, crop varieties, and financing;
- -Vary sales approach to meet needs of buyer;
- -Work irregular hours;
- -Qualify for a state license to sell real estate; - Read land terrain maps, property maps, and legal descriptions.

DOT 250.357-018

PREPARATION AND TRAINING:

The farm real estate salesperson must be a high school graduate. He/she will find better employment with college training in agriculture and real estate.

COURSE OF STUDY SHOULD INCLUDE:

English	Psychology	Business Administration
Economics	Mathematics	Property Appraisal
Real Estate	Merchandising	General Agriculture
Business Law	Salesmanship	

ADDITIONAL FACTS ABOUT TRAINING

Educational requirements are increasing. By 1980 every new farm real estate salesperson will be required to have college level training in legal aspects of real estate, real estate practices, as well as agriculture. Most employers, even today, prefer salespersons with some college training.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITIES AND DISTRIBUTION

Most farm real estate salespersons are regular real estate salespersons with some background in agriculture.

Despite continued strengthening of license and examination requirements, the number of real estate sales people are increasing.

OPPORTUNITIES FOR ADVANCEMENT

Salespersons with experience and training can become real estate brokers, appraisers, real estate counselors, property managers, mortgage financers and sales managers in brokerage offices.

MORE ABOUT THE JOB:

The farm real estate salesperson or broker is at the center of most farm property transactions. He/she represents the property owner who wants to sell and finds potential buyers for homes, business properties and ranches. Often, he/she also handles non-farm transactions if he/she works out of a general real estate office.

The real estate salesperson:

- -Studies property listings to become familiar with properties for sale;
- -Studies land conditions, crop varieties and water access;
- -Reviews trade journals and keeps informed of marketing conditions and values;
- -Interviews prospective clients to solicit listings;
- -Accompanies prospects to property sites;
- -Quotes selling prices;
- -Discusses conditions in terms of sale or lease;
- -Draws up contracts, deeds and leases;
- -Negotiates loans on properties and initiates escrow procedures;
- -Often handles non-agricultural property transactions;
- -Keeps records of property sold.

JOB CLUSTER #12
"Marketing and Distribution"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary

Earnings of full-time farm real estate agents ranged from $15,000 - $30,000 a year in 1978.

HOURS OF WORK

There is no set pattern for hours of work or number of working days. Work on weekends and at night is the rule rather than the exception.

FRINGE BENEFITS

Some brokers pay partial or full life and health insurance.
Vacations are usually without compensation.
Very few benefits are provided by the employers.

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Stop at a local real estate office for more information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

National Association of Realtors
155 East Superior Street
Chicago, IL 60611

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Leasing Agent	250.357-014
Sales Agent, Pest Control Service	251.357-018
Sales Agent, Real Estate	250.357-018

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Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB:

FARMHAND
(D.O.T. - FARMWORKER, GEN.)

The FARMHAND, a full-time farm employee, usually works for an individual farmer. He or she may spend all their time at one task, such as milking; or may, on a medium-sized family farm, do most of the things the farmer does--plant, cultivate, and harvest crops; clean barns and animal yards; repair fences; haul produce and supplies.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Dependable	Mechanical	Average or better physical strength and stamina
Loyal	Numerical	Strength of arms and legs
Prefer working alone		Normal eye-hand coordination
Like animals		Normal use of fingers
Prefer outdoor work		Normal vision and hearing

YOU SHOULD KNOW THAT

- -Youth and lack of education do not keep you from finding an entry level job as a general farmhand;
- -You must absolutely show dependability to succeed on a farm;
- -Some mechanical aptitude is helpful and may be necessary because of the number of machines you will work with.

YOU MUST BE ABLE TO

- -Perform heavy physical labor including lifting and carrying weights of fifty pounds or more;
- -Work while stooping, kneeling, crawling, and crouching and while on ladders;
- -Work alone without direct supervision;
- -Follow instructions closely and carry required projects through to completion;
- -Do odd jobs of carpentry, plumbing, and machine repair.

D.O.T 421.683-010

PREPARATION AND TRAINING:

The general farmhand does not need a high school diploma to qualify for a beginning job. The farmhand can benefit from high school training for promotional possibilities. He or she will receive informal, basic on-the-job training.

Anyone interested in careers in farming and is not living on or near a farm should join a 4-H club or the Future Farmers of America in order to find out about farming as a way of life.

Anyone interested in an eventual career in farm management, ownership, or other upper level jobs should investigate college programs related to farming. Some work experience, preferably on the farm, is usually necessary to qualify.

COURSE OF STUDY:

High School: Courses in vocational agriculture and related subjects, business mathematics, and shop courses are good preparatory courses.

On-the-Job: Training is given in various maintenance chores, care and handling of machines used, and in animal handling.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Although agriculture remains one of the larger sources of employment in the United States, the total number of farm jobs has been dwindling for many years.

New types of farm machinery are eliminating many unskilled farm jobs. Those who want to get jobs must become highly skilled in operating and maintaining farm machinery.

The projected opportunities in Montana indicate for the years 1980-90 the industry expansion will be 0, replacement needs 840, total jobs available for this period, 840.

OPPORTUNITIES FOR ADVANCEMENT

Advancement opportunities are severely limited for poorly educated general farmhands and best for hands who have high school or college training.

With small or medium sized farms, promotional opportunities may be limited to the members of the family who own the farm.

With larger commercial farms, farmhands may advance to jobs as foreman, farm operators, or establish their own farm.

MORE ABOUT THE JOB:

Duties of the farmhand include:

-Attending the livestock and crops on a farm devoted to diversified agriculture;
-Feeding and watering cattle, poultry and pets;
-Cleaning barns, stables, pens and kennels using rake, shovel, water and other cleaning materials;
-Digging seedlings such as tobacco plants, strawberries, tomatoes and orchard trees using hoe and transplanting them by hand;
-Shoveling earth to clean irrigation ditches and opening sluice gates to irrigate crops;
-Cleaning plows, combines and tractors using scraper and broom;
-Harvesting crops by digging, cutting, pulling or lifting them;
-Stacking bales of hay and loading them onto wagon or truck using hand tools;
-Preparing farm buildings, fences and other structures;
-May haul livestock and produce to market.

JOB CLUSTER #1
"Agri-Business and Natural Resources"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40-70			

Farm laborers are generally among the lowest cash paid workers, usually minimum wages. In addition to their wages, some hired farm workers receive room and board allowances.

HOURS OF WORK

Most farmhands work six days per week, eight to ten hours per day. Most start their work very early in the morning and sometimes have to work a split shift.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

paid vacations
paid holidays

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Talk to a local farmer about the opportunities for a farmhand.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Farmer's Educational and Cooperative Union of America
1575 Sherman Street
Denver, Colorado

U.S. Department of Agriculture
Washington, D.C. 20250

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Farm-Equipment Mechanic	624.281-010
Sprayer (Agriculture)	408.684-014
Field Hauler	409.683-014
Farmer, General	421.161-010
Farm Machine Operator	409.683-010

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: FEED COMPANY FIELD PERSON (FEED & FARM MANAGEMENT ADVISOR)

FEED COMPANY FIELD PERSONS work for a specific feed company. They assist individual farmers by serving them as an advisor and by working with them in selecting the proper feed for their particular type of livestock.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Mature	Verbal	Good health
Responsible	Numerical	Good vision and hearing (natural or corrected)
Alert	Mechanical	Non-allergic skin
Honest		Good speech
Well-groomed		Good perception
Tactful		

YOU SHOULD KNOW THAT

- -A high school education is the minimum;
- -Unless you have had experience and background in agriculture or some college training, you will have more difficulty getting a job;
- -Competition is fierce, especially in heavily agricultural areas.

YOU MUST BE ABLE TO

- -Drive a car, usually furnished by the company;
- -Observe livestock and diagnose certain problems or possibilities for improvement;
- -Recommend certain feeds for the farmer's particular breeds;
- -Sell the farmer on your brand of feed;
- -Travel extensively;
- -Tolerate and spend a great deal of time outdoors in all kinds of weather.

DOT 096.127-018

PREPARATION AND TRAINING:

A high school education is the minimum. Many employers prefer some college training, especially where extensive experience with feeds and livestock is lacking. Some employers even require a candidate to complete a four-year college education. Work experience is valuable. Summer or part-time employment plus sufficient education will increase your chances for employment and advancement.

HIGH SCHOOL COURSES INCLUDE:

Vocational Agriculture	Merchandising
English	Sales
Speech	Commercial Law

ADDITIONAL FACTS ABOUT TRAINING:

The feed industry is rapidly expanding and with it opportunities for a career as a feed company fieldperson. Today, only a high school education is usually required. Within a few years, however, many companies may require a four-year degree. Many field people are specializing. Some deal only with poultry, some with cattle, some with hogs, and some with horses.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

The opportunities for employment are relatively good, but the turnover each year is low. Since this field is growing, however, there are new openings each year. Employment is best in large agriculture areas.

ADVANCEMENT

The feed company fieldperson, with sufficient experience and training, can become:

Manager	District Manager
Owner	Regional Manager

MORE ABOUT THE JOB:

The feed company fieldperson:

-Makes contracts with potential clients;
-Makes sales;
-Advises the farmer as to the proper feed;
-Studies farmers' livestock;
-Keeps informed on new trends in agriculture;
-Remains on 24-hour call;
-Places orders with feed mill;
-Issues receipt on sale of feed;
-Records all transactions;
-Diagnoses certain problems with livestock;
-Makes sure order was received.

JOB CLUSTER #1
"Agri-business & Natural Resources"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	40			

Salary is usually paid on a commission incentive basis. The fieldperson is paid a flat salary, normally ranging from $600-$875 with the average being about $725 per month. Once sales exceed a set amount, an additional percentage of all sales above that amount is received.

HOURS OF WORK

Total working hours depend on the number of potential customers and the initiative of the fieldperson. During peak sales, he/she may work up to sixty hours a week. Weekend and evening work is quite common.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

Furnished car	Disability plan	Sick leave
Health insurance	Paid holidays	
Life insurance	Paid vacations	

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

A local feed company can provide some information and may be able to direct you to find additional sources of information.

ADDITIONAL SOURCES OF INFORMATION:

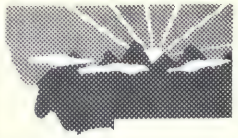
Your school counselor and librarian may also help you find additional information

You can also contact your County Agents

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Dairy Milk Sampler	410.357-010
Ag. Extension Agent	096.127-010
Soil Scientist	040.061-058
Seed Analyst	040.361-014

D.O.T. Fourth Edition, page 69



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB:

FEED MILL OPERATOR
(D.O.T. - PELLET-MILL OPERATOR)

The FEED MILL OPERATOR works for a seed and feed company and, through the operation of a variety of machines, performs one or more of the following duties: cleans feed, mixes feed, measures feed, and mashes feed. He/she operates selector boards which automatically performs a variety of jobs.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Responsible	Mechanical	Good health
Careful	Numerical	Physical stamina
Dependable	Finger dexterity	Eye-hand coordination
Alert	Scientific	Agility
Adaptable to routine tasks		Normal vision (natural or corrected)
Ability to work with others		
Ability to take orders		

YOU SHOULD KNOW THAT

- -You will work with formulas when measuring feeds for mixing;
- -You will run complicated machines to perform a variety of tasks;
- -Depending on place of employment, you may or may not be a member of a union;
- -You will usually receive several weeks training on the job.

YOU MUST BE ABLE TO

- -Learn the different types of feed;
- -Comprehend and follow written and verbal directions, often involving formulas;
- -Learn to operate power machines such as cleaner, mixer, molassifier;
- -In some plants, drive a fork lift or truck;
- -Lift relatively heavy objects, usually feed sacks.

DOT 520.685-178

PREPARATION AND TRAINING:

A high school education is usually the minimum requirement. Some college training is often preferred, usually in vocational agricultural and/or mechanical fields.

RECOMMENDED HIGH SCHOOL COURSES:

English	Metal Shop
Math	Machine Shop
Vocational Agriculture	Wood Shop

ADDITIONAL FACTS ABOUT TRAINING

Experience with feeds or machines is helpful and will usually lead to quicker employment. When you are employed, you will probably be placed on a two to three week training period where you will learn about the various feeds used by a particular company as well as the variety of machines you must learn to operate. If you want to learn about commonly used machines, get training using the following:

mixer	molassifier	elevators
pellet mixer	roller mill	conveyers
cleaner	grinder	fork lift

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

The turnover rate is moderate.

There are more applicants than openings.

Opportunities are best in heavily agricultural areas.

OPPORTUNITIES FOR ADVANCEMENT

With additional training or experience, the feed mill operator can become:

feed mill fieldperson	mill manager
mill salesperson	mill owner

MORE ABOUT THE JOB:

The feed mill operator spends a lot of time setting automatic machines, operating the machines and adding various elements to the machine controlled mixes. He/she may or may not drive a fork lift or truck occasionally.

He/she also must:

-Do some occasional minor repair work on machines;
-Use formula card to set machines to obtain desired mix ratio;
-Operate an automatic selector panel;
-Operate machines such as a mixer, pellet mill, cleaner, molassifier, roller mill, grinder, grain elevator and conveyer belt;
-Give orders to subordinate workers;
-Keep a written record of all mixing and cleaning;
-Lift relatively heavy objects;
-Work with customers, other employees, employer and truck drivers;
-Help truck driver load or unload feed to or from mill.

JOB CLUSTER #1
"Agri-Business and Natural Resources"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$3.40-$5.00/hr	$3.65-$4.40/hr	$3.40-$3.65/hr

HOURS OF WORK

The feed mill operator usually works an eight-hour shift. However, some mills employ a staggered-hour shift where the operator may be required to work every other Saturday. There is some overtime work.

FRINGE BENEFITS

Depending on place and length of employment, you may receive:

health insurance
disability insurance
life insurance
paid holidays
paid vacations

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Dough mixer (bakery prods.)	520.582-010
Candy-maker helper	520.685-050
Flour mixer (grain & feed mill)	520.685-106
Press operator, meat	520.685-182
Sausage maker	520.685-202

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: FILE CLERK

A FILE CLERK is an office employee who reads material to be filed and decides into which file it should be placed according to the system being used, such as by alphabetical order, title, or subject matter. If materials are taken from the files, an accurate record must be kept as to who took them and when they were taken. Periodically, the files might have to be cleared of obsolete materials and checked for misplaced materials.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Accurate	Clerical	Good general health
Good memory	Numerical	Full use of both hands & legs
Initiative	Verbal	Normal vision and hearing (natural or corrected)
Judgement		
Concern for detail		Good finger dexterity

YOU SHOULD KNOW THAT

- -You must be able to combine speed and accuracy concerning filing and other tasks;
- -You may be given a variety of tasks to perform such as coding and assembling material;
- -You must be able to lift, pull out folder loaded drawers, stretch, bend, and reach to locate records.

YOU MUST BE ABLE TO

- -Perform routine duties on a continuous basis;
- -Be alert and give attention to detail and have ability to adapt to change;
- -Scan and sort besides having a working knowledge of complete filing system used;
- -Spell and use English correctly;
- -Work temporarily in uncomfortable positions;
- -Sit for long periods of time.

DOT 206.362-010

PREPARATION AND TRAINING:

RECOMMENDED HIGH SCHOOL COURSES:

English	Typing	Business Machines
Spelling	Filing	Office Practice
Arithmetic	Record Keeping	

GENERAL INFORMATION

Since the work of the file clerk is mostly clerical in nature, basic clerical training is available in high schools, adult education centers, private business colleges, and colleges. High school graduation is adequate for entry into most file clerk positions, but the more education an individual has, the better the job prospects.

ADDITIONAL FACTS ABOUT TRAINING:

This is often an entry level job for which on-the-job training is often given. Testing for clerical aptitude is common procedure and the test may include reading comprehension, numerical skill, and selling ability.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities for file clerks exist throughout Montana.
Despite labor saving equipment and more efficient methods, employment opportunities for file clerks has not diminished.
Automatic equipment will be needed and file clerks will be used to assist.

OPPORTUNITIES FOR ADVANCEMENT

Advancement outlook will continue to be favorable for file clerks who seek higher skills such as typing, shorthand, and office machine operation. Most advancement will result from employee turnover which is exceptionally high in this field. Advancement may be to:

clerk typist	switchboard operator
insurance clerk	receptionist
secretary	stenographer

MORE ABOUT THE JOB:

The file clerk is responsible for maintaining all material to be stored and filed besides the currentness and accuracy of the system being used. The clerk is on the move a great deal of the time from high to low files, between departments, and possibly even different floors. File clerks may be assigned different tasks and jobs depending on their abilities and the need.

In most business organizations, the file clerk:

-Files correspondence, reports, technical documents;
-classifies and indexes file material;
-sorts and codes material;
-removes material from files;
-traces material in boxes, files, and drawers;
-reads incoming materials and sorts according to file system;
-may operate keypunch to enter data on tabulating cards;
-may photograph records on microfilm;
-makes calculations and supplies written information from files;
-prepares cross reference materials;
-files unclassified material;
-keeps records;
-locates materials;
-performs simple clerical tasks;
-types indexing information on folders;
-may enter data on records;
-maintains files;
-inserts additional information in files;
-investigates for certain information contained in files.

JOB CLUSTER #2
"Business and Office"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
37-40	$127-$194/wk	$152/wk	$127/wk

Because of varying rates of pay throughout Montana, specific information on salaries may be obtained at your nearby employment office.

HOURS OF WORK

The forty-hour workweek is normal. Seldom is there overtime work.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

-health insurance
-retirement plan
-paid holidays
-paid vacations

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LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Your counselor may have additional information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

United Business Schools Association
1730 M. Street Northwest
Washington, D.C. 20005

National Association of Legal Secretaries
P.O. Box 905
Beckley, W. Va. 25802

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Fingerprint Clerk	209.367-026
Records Custodian (banking)	206.387-026
Classified Ad Clerk (printing and publishing)	247.367-010
Coding Clerk	209.387-010

D.O.T. Fourth Edition, page 158

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB:

FILM LIBRARY CLERK
(D.O.T. FILM OR TAPE LIBRARIAN)

The FILM LIBRARY CLERK works in an audio-visual library of a school, public library, private firm, or educational office. He or she stores and issues films and other materials, compiles catalogs, repairs damaged materials, and services and operates the various audio-visual machines.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Dependable	Numerical	Good health
Neat	Clerical	Normal vision and hearing (natural or corrected)
Able to take orders	Mechanical	Eye-hand coordination
Able to work with others	Verbal	Finger dexterity
		Ability to lift some heavy objects

YOU SHOULD KNOW THAT

-A high school education is required by most employers.
-You will receive on-the-job training in the operation and care of various materials and equipment.

YOU MUST BE ABLE TO

-Lift some heavy objects, such as film projectors;
-Work well with people including other clerks and customers;
-Learn to operate various machines such as film projectors and tape recorders;
-Learn to store and catalog films and other materials and to keep a record of the whereabouts of all materials.

DOT 222.367-026

PREPARATION AND TRAINING:

High school graduation is usually the minimum. Those employers who do not now require high school graduation are expected to make such requirement in the near future.

HIGH SCHOOL COURSES:

English	Mathematics	Library Procedures
Audio-Visual Equipment	Electrical Shop	Record Keeping

COURSES AFTER HIGH SCHOOL:

Library Practices and Procedures	Record Keeping and Management	Bookkeeping
		Typing

ADDITIONAL FACTS ABOUT TRAINING:

You will receive on-the-job training upon employment, during which time you will learn to store and catalog materials and equipment and operate the various machines. Any experience working with films, audio-visual equipment, or in a library will be helpful and may lead to quicker employment and advancement.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

There are opportunities for employment at school libraries, public libraries, private business firms, educational offices, and television and motion picture companies.

Opportunities are generally good, although limited in number.

Opportunities are expected to increase as schools turn more and more to audio-visual aids as a form of teaching.

OPPORTUNITIES FOR ADVANCEMENT

With additional experience and advanced training, openings exist for the film library clerk as audio-visual librarian, or chief librarian.

MORE ABOUT THE JOB:

The film librarian sometimes:

-Stores various audio-visual materials;
-Fills out order forms and issues materials toteachers and students;
-Compiles and maintains catalog of materials;
-May inspect and repair damaged films, film strips and other materials;
-Stores other materials used with films and slides;
-Maintains equipment used in audio-visual work such as projectors and recorders;
-Repairs damaged equipment or refers it to the repair technician;
-Operates projectors and recorders upon request;
-May advise those planning to show films on proper acoustics and lighting.

Materials in the library may include:

8-millimeter and 16-millimeter motion picture films
film strips
slides
tapes
transparencies
records

Equipment used may include:

film and slide projectors
overhead and opaque projectors
film and slide viewers
tape and video tape recorders
harwald (film inspection and cleaning)
microphone and speaker sets

JOB CLUSTER #2
"Business and Office"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$625-$695/mo	$630-$650/mo	$625/mo

HOURS OF WORK

The film library clerk works a standard eight-hour day, five days a week. There may be some overtime work during the evenings or weekend.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

retirement plan
health and medical plan
sick leave
paid holidays
life insurance
paid vacations
overtime pay or compensating time off

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Office of the Superintendent of Public Instruction
Film Library
Capitol Building
Helena, Montana 59601

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Stock Clerk	222.387-058
Checker, Bakery Products	222.487-010
Magazine Keeper	222.367-038

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB:

FINANCE MANAGER
(D.O.T. - FINANCE COMPANY MANAGER)

The FINANCE MANAGER supervises and coordinates the work of all finance company employees. They help establish and maintain those policies and procedures necessary to insure a smooth and efficient operation.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Responsible	Verbal	Good general health
Honest	Mathematical	Normal eyesight and hearing (natural or corrected)
Patient	Persuasive powers	
Polite	Executive ability	
Discreet	Keen business sense	Good grooming
Pleasant disposition		

YOU SHOULD KNOW THAT

-Almost all finance companies require a person to have a few years experience in the loan business before he/she can become a manager;
-This is not an entry position;
-The finance manager must use good business sense and good judgement and not let his or her personal feelings influence his/her decisions concerning applicants for loans.

YOU MUST BE ABLE TO

-Observe, collect facts, and draw sound conclusions from logical thinking;
-Listen carefully and talk intelligently to clients who seek your help;
-Assume responsibility and supervise the work of others;
-Gain and keep the good will of customers since you want them to return for further services;
-Stand the pressures your job often involves.

DOT - 186.117-038

PREPARATION AND TRAINING:

Finance companies prefer to hire managers who have a thorough background in business management.

Almost all finance companies require a person to have a few years experience in the loan business before he/she can become a manager.

High school graduation is a necessity and many firms prefer some college or a bachelor's degree in business administration or graduation from a business school.

The future manager should study office management and control, bookkeeping and business law.

Some large chains give training courses for new employees to prepare them for future advancement.

The personal contacts of the individual and their knowledge of the technicalities and intricacies of the finance business are most important considerations; it is only after considerable exposure that they may be expected to function at full capacity.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Finance company managers are needed throughout the state.

The outlook for a career as a finance manager is promising.

The tremendous growth of the loan business has made openings available to many qualified people.

Since the success of an entire office depends on the efficiency of the manager, good managers are constantly sought by established companies as well as by new ones.

OPPORTUNITIES FOR ADVANCEMENT

Advancement possibilities are completely dependent on the size and policies of the particular company.

A young person may begin in the collections department and be promoted to assistant manager and eventually to manager when an opening occurs.

Managers of chain offices are promoted to district supervisory jobs or home office positions.

MORE ABOUT THE JOB:

Finance companies vary considerably in size and the duties of the manager depend to a great extent on the volume of business done by the office and the number of persons employed.

The manager does most of the work connected directly with issuing loans to customers.

The applicant is interviewed privately and answers questions while the manager fills out an application form. During this confidential interview, the manager must decide whether or not the customer appears to be a good credit risk; in some cases, the applicant's statements or manner may call for an immediate refusal of the loan. All applicants who are not obviously ineligible for a loan consideration are investigated. This may be done by the manager or by an investigations clerk who checks with the credit bureau. On the basis of the report and his/her personal judgement, the manager decides whether the loan should be accepted or refused.

The finance manager supervises the collection program of the office. Payments are generally made by mail or in person, and if an account is past due, he or she instructs the collector to send out a series of form letters to the delinquent borrower. The manager prepares the daily reports of daily business activities for the company. He/she includes loans made, money collected, bank balance, and operating expenses. He/she signs all checks issued by the office, both to customer and in payment of office expense.

In a larger office, the manager shares the daily work with assistants, but makes the final decisions about loans and has full responsibility in the operation of the office.

JOB CLUSTER #2
"Business and Office"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40-48	$1,000-$1,500/mo		$1,000/mo

Educational training is a strong influence for level of salaries paid. Salaries may vary throughout the state.

HOURS OF WORK

Credit offices are usually open from 9:00 to 5:30 and sometimes one or two nights a week. Some are open on Saturdays.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

hospitalization

bonuses given when an increase in volume and a good profit is shown

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

The credit department of a local business or a loan company can provide you with further information.

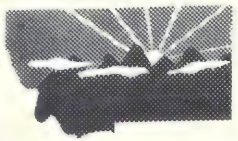
ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

National Association of Manufacturers
Education Department
2 East 48th Street
New York, New York 10017

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Property manager (gov. ser.)	186.167-046
Manager (hotel and rest.)	187.117-038
Manager (insurance)	186.167-034
Manager, Leasing (petrol. production)	186.117-046
Trust Officer (banking)	186.117-074



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: FIREFIGHTER

FIREFIGHTERS in city, town and rural fire departments protect life and property from fire, whether it be a smoldering trash fire that can be brought under control with a hand fire extinguisher or a spectacular blaze requiring equipment from several fire companies.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Responsible	Mechanical	Above average physical strength
Alert	Numerical	Above average physical stamina
Courageous	Verbal	Above average agility
Calm	Intelligent	Normal vision and hearing
Able to make quick decisions		Must be at least 5'9"
Desire to serve others		Must weigh at least 150 lbs.
Able to work well with others		
Able to take and give orders		

YOU SHOULD KNOW THAT

-Prospective firefighters must be between 21 and 31 years of age;
-The on-the-job death rate is three times the average of U.S. workers;
-The duty injury rate was seven times the U.S. industrial average.

YOU MUST BE ABLE TO

-Pass rigid physical examination;
-Tolerate confinement to headquarters for long periods;
-Tolerate heights;
-Tolerate smoke and fire;
-Follow directions which may be at the risk of your life.

D.O.T. 373.364-010

PREPARATION AND TRAINING:

The firefighter is expected to be a high school graduate. You will find military experience in firefighting a valuable background.

RECOMMENDED HIGH SCHOOL COURSES:

Physics	Electronics	Chemistry
Algebra	Geometry	Mechanical Drawing
Blueprint Reading		

ADDITIONAL COURSES WHICH ARE VALUABLE:

English	Report Writing
Public Speaking	Fire Science
	First Aid

ADDITIONAL FACTS ABOUT TRAINING

After appointment, a city firefighter usually serves a probationary period. Upon hire, firefighter trainees receive from four to ten weeks of formal training.

SPECIAL ENTRY REQUIREMENTS:

The firefighter candidate:

must be between 21 and 31 years of age;
must meet minimum height and weight requirements;
must pass a rigid physical examination.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Turnover in the occupation is low.

It takes three years to train a firefighter; if a person stays that long, they usually become a career employee.

Opportunities are greatest in urban areas.

The **number of people** who qualify for firefighter jobs in large cities is usually greater than the job openings.

OPPORTUNITIES FOR ADVANCEMENT

The firefighter with experience and additional training may be promoted to:

engineer	fire chief
lieutenant	assistant chief
captain	

MORE ABOUT THE JOB:

The firefighter spends about 25% of on-the-job time in actual firefighting or in answering emergency calls to provide resuscitation or rescue service which might range from freeing a child in a locked bathroom to rescuing a pet cat on a telephone pole. The remainder of time is spent in making inspections for fire prevention purposes, in public relations work, in fire drills, demonstrations and in maintaining apparatus.

Other duties may include:

-Selecting hose nozzle depending on type of fire;
-Directing stream of water or chemical on the fire;
-Positioning and climbing ladders;
-Using ax, chisel and crowbar to gain access to buildings;
-Protecting property from smoke damage by using waterproof salvage covers, smoke ejectors and deodorants;
-Administering first aid and artificial respiration;
-Inspecting buildings for fire hazards;
-Helping to maintain over 3,000 items of tools and equipment;
-Participating in drills, demonstrations and courses in hydraulics;
-May drive the firetruck;
-May fill fire extinguishers in institutions and industrial plants;
-Educating the public about fire prevention and safety measures.

JOB CLUSTER #14
"Public Service"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
Varies	$12,700-$18,000/yr	$15,000/yr	$12,700/yr

Salaries vary by city size and region of the country.

HOURS OF WORK

Usually there are rotating shifts with fighters on duty 24 hours of the day. The workweek varies for 48 to 72 hours; usually 24 hours on duty and 48 hours off.

FRINGE BENEFITS
Depending on length and place of employment, you may receive:

- worker's compensation insurance
- health and accident insurance
- sick leave benefits
- retirement benefits
- paid vacations
- paid holidays or compensation

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs.
You may contact a youth representative at your local Employment Service Office

Visit your local fire department for further details.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information.

International Association of Fire Chiefs, Incorporated
232 Madison Avenue
New York, New York 10016

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Smoke Jumper (gov. ser.)	452.364-014
Blast-furnace Keeper (iron and steel)	502.664-010
Lead Caster (elec. equip.)	502.684-010

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: THE FLAGGER

Performs a combination of duties to provide ground support for an Aerial Applicator-Crop Duster. Duties include mixing fertilizers and pesticides, loading seeds, fertilizers or pesticides onto airplane, signalling pilot from the ground during the actual application, directing the pilot to the proper fields on which to apply load. He/she steps off the proper number of rows so the pilot does not over-spray or skip crops.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Interest in airplanes	Numerical	Good general health
Interest in agriculture	Clerical	Able to withstand extremes of temperature
Liking for the outdoors	Mechanical	
	Chemical	

YOU SHOULD KNOW THAT

-You may be required to wear a gas mask as protection against poisonous chemicals;
-You may be required to use a two-way radio;
-You may be able to work summer vacations as a student.

YOU MUST BE ABLE TO

-Stand for long periods of time;
-Work irregular, sometimes long, hours;
-Withstand fumes and odors of chemical sprays and dust.

DOT 409.667-010

PREPARATION AND TRAINING:

There is no minimum schooling, although high school graduation is preferred. However, if you do want to advance into better jobs in the aerial application industry, some college should be considered.

RECOMMENDED HIGH SCHOOL SUBJECTS

Potential pilots should take math, chemistry, drafting.
Other helpful courses are reading, basic math, and shop courses.

COURSE OF STUDY AFTER HIGH SCHOOL

None is required. There are some programs that offer training to prepare prospective pilots or aircraft mechanics.

ADDITIONAL FACTS ABOUT TRAINING

Training for the flagger is given on the job. The training period is short, usually one or two days.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Jobs for flaggers exist in almost all agricultural areas.

Use of airplanes for pest control, seeding, and fertilizing of fields is increasing and the need for flaggers will continue to increase.

Work in any one area of the state is seasonal.

ADVANCEMENT

Flaggers have little direct opportunity to advance.

With additional training, however, one can move into aircraft mechanics or into flying.

MORE ABOUT THE JOB:

The flagger is responsible for guiding the aerial application pilot over the proper area to be sprayed or dusted with chemicals.

Using a flag, or when night flying is done, a high powered flashlight, he/she signals the pilot to exactly the right spots for fertilizer or pesticide application.

Usually, flaggers work in pairs; one at each end of the field. Sometimes, when there are powerlines or other hazards, additional flaggers may be needed.

Flaggers start at one side of the field, and using "Y" shaped sticks or other measuring tools, pace off the proper distance between rows. They wave the flag or flashlight until the duster pilot has made a pass at the field, then as the airplane turns around for another run, they move the required distance and signal the new position in which the plane should fly.

The flagger's job, particularly in night flying, is very important because the pilot would otherwise have trouble judging exactly where to apply chemicals or the exact location of hazards.

JOB CLUSTER #1
"Agri-Business and Natural Resources"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$3.40-$5.15/hr	$4.40-$4.90/hr	$3.40/hr

Because of varying rates of pay throughout Montana, specific information on salaries may be obtained at your nearby employment office.

HOURS OF WORK

There is no standard workweek. Hours are usually in the early morning and late afternoon. Work may start at 4:00 a.m. and run as late as 9:00 p.m. If flying at night, hours may run later.

FRINGE BENEFITS

Depending on the place and length of employment, you may receive the following:

overtime pay
medical insurance

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Employment Security Division
Box 1728
Helena, Montana 59601

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Swamper-Loader	459.687-010
Aircraft Engine Mechanic	621.281-014
Aircraft Pilot (agric.)	196.263-010

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: FLIGHT ATTENDANTS (also called stewardesses and stewards)

FLIGHT ATTENDANTS are aboard almost all passenger planes operated by commercial airlines. FLIGHT ATTENDANTS are responsible for the comfort and safety of the passengers. They check seat belts, instruct passengers on emergency procedures, serve meals, and refreshments, and keep the galley neat and clean. They greet passengers, check tickets and assist passengers with carry-on luggage. They may also provide other services as requested.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Poised and well-groomed	Verbal	Height 5'2" to 6' with proportionate weight
Good complexion	Logical and clear thinking	Good vision
Enjoy people	Calm	Excellent health
Enjoy traveling		
Pleasant, friendly personality		

YOU SHOULD KNOW THAT

- -Proper course selection in high school, two years of college, or two years working experience in the business world will give the necessary background training;
- -You must be 5'2" to 6' in height with proportionate weight;
- -Flight Attendants with the longest service get the most desirable flights.

YOU MUST BE ABLE TO

- -Tolerate confinement and motion on long flights;
- -Be on your feet for long periods of time;
- -Maintain balance while carrying various objects;
- -Maintain poise when confronted with sick or irritable passengers;
- -Be free to travel;
- -Get along with people.

D.O.T. 352.367-010

PREPARATION AND TRAINING:

The airline flight attendant:

must have at least a high school diploma;
two years of college training is preferred;
will get about five weeks training from the airline's own school.

RECOMMENDED HIGH SCHOOL SUBJECTS:

Home Economics	Foreign Language
English	Hygiene
Speech	

COURSE OF STUDY AFTER HIGH SCHOOL:

Speech	First Aid
Foreign Language	Psychology
English	

SPECIAL ENTRY REQUIREMENTS:

There is usually a six-month probationary period upon completion of training.

Meticulous grooming, pleasing appearance, and a congenial, poised, and tactful manner are expected at all times.

You will find that some airlines require the flight attendant to purchase their own uniform and accessories the first year.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Tremendous expansion has occurred in commercial aviation in the past decade and indications are that it will continue. There are thousands of opportunities for young men and women to get jobs in this profession because of the large rate of turnover. While these facts guarantee an ever expanding employment outlook, it should be noted that about one in twenty-five applicants is accepted for training by the airlines. Anyone may apply. Once accepted, you will probably live in a large metropolitan area.

ADVANCEMENT

Advancement may come quickly since most flight attendants work only two or three years and then resign. The flight attendant with experience and ability may be promoted to: supervisor of flight attendants, instructor in training schools, employment representative, public relations agent, sales agent or receptionist.

MORE ABOUT THE JOB:

Flight attendants are on almost all passenger planes operated by commercial airlines. Their job is to make passengers' flight comfortable and enjoyable. The flight attendant's duties begin when the plane's crew, of which the attendant is a part, receives a pre-flight briefing of routes and weather factors. About thirty minutes to an hour before the take-off the attendant boards the plane to make sure the cabin, buffet facilities and the supplies are in order.

Job responsibilities include:

-Making sure the passenger cabin is in order;
-Seeing that emergency gear and supplies are aboard;
-Seeing that necessary beverages and food are in galley;
-Greeting the passengers;
-Checking the passengers' tickets;
-Assisting the passengers with their small luggage and coats;
-Helping care for babies and small children;
-Serving the meals and beverages;
-Adjusting ventilation and seats;
-Completing flight records.

JOB CLUSTER #15
"Transportation"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary

Flight attendants receive a base wage, plus flight pay and equipment pay, which varies with the kind of airliner they are assigned. Beginning salaries range from $700 to $800 a month. Top base pay for experienced attendants ranges from about $1000 to $1200 a month. Attendants on international routes earn higher salaries than those on domestic routes.

HOURS OF WORK

Flight Attendants work nights, holidays and weekends.

FRINGE BENEFITS
Depending on length and place of employment, you may receive:

- free life insurance
- discount on regular plane fare
- allowance for food and lodging
- medical and retirement leave
- uniform replacement at cost
- incentive pay

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office.

Your school counselor may have additional information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Airline Stewards and Stewardesses Association International
205 West Wacker Drive
Chicago, Il. 60606

Air Transport Association of America
1709 New York Ave. N.W.
Washington, D.C. 20006

The Airline of your choice addresses may be obtained from your local or nearby airport.

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Flight Attendant, Ramp	352.367-014
Host/Hostess, Ground	352.377-010
Social Director	352.167-010
Passenger Attendant	350.677-014

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: FLIGHT SERVICE SPECIALIST

The FLIGHT SERVICE SPECIALIST is licensed and employed by the Federal Aviation Administration (FAA) to provide pilots with pre-flight, in-flight, and emergency assistance including weather information, air navigation conditions, and air traffic.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Alert	Numerical	Normal vision and hearing (natural or corrected)
Dependable	Clerical	Eye-hand coordination
Calm	Verbal	Good Speech
Able to make quick decisions		Able to work sitting most of the day
Mature		Good physical health

YOU SHOULD KNOW THAT

- -The accuracy and thoroughness of your information could be the difference between a safe flight and disaster for a pilot and his/her passengers;
- -A combination of college training and experience in working with people is required;
- -You must pass a Civil Service examination and qualify for licensing by the Federal Aviation Administration (FAA).
- -Some career moves are necessary for advancement.

YOU MUST BE ABLE TO

- -Learn to operate ground to airplane communications devices;
- -Speak effectively and concisely and relay all necessary information to pilots;
- -Read a weather chart, barometer and traffic chart;
- -Work well under pressure, especially when providing emergency assistance to pilots in trouble;
- -Pass a rigid physical examination.

DOT 193.162-014

PREPARATION AND TRAINING:

Schooling would most often require a four-year college degree or a combination of three years of college and experience in a position of responsibility. Armed forces experience in air traffic control may substitute for educational requirements.

RECOMMENDED HIGH SCHOOL SUBJECTS

Public Speaking
Electricity
Mathematics
Radio
Physics

ADDITIONAL FACTS ABOUT TRAINING

Successful applicants are given 8 - 14 weeks of intensive training at the FAA Academy. After being assigned to a job at an airport, they receive additional classroom instruction and on-the-job training concerning specific traffic data. After working six months, they generally qualify as an assistant controller and receive additional training and tests of emotional stability before qualifying as a specialist.

Currently training is divided into three phases.

Phase 1 - Approximately 320 hours at the facility.
Phase 2 - Approximately 8 - 14 weeks at FAA Academy in Oklahoma City.
Phase 3 - Qualification training at assigned facility, usually takes about one month.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

There are about 340 flight service stations throughout the United States.

Opportunities are good, but competition is quite keen.

Opportunities are best in large urban areas.

ADVANCEMENT

With additional training, experience and passage of appropriate tests, the flight service specialist can become any of the following:

FAA Flight Service Station Assistant Chief.
FAA Flight Service Station Chief.
Air Traffic Tower Specialist.
Air Route Control Specialist.
FAA Flight Service Station Deputy Chief.

MORE ABOUT THE JOB:

The flight service specialist:

- -Provides pre-flight, in-flight, or emergency information to civil and military pilots in order to insure maximum flight safety;
- -Works in a flight service station center in an airport;
- -Uses air-ground radios and other communications equipment;
- -Must pass an examination and be licensed by the FAA.

Typical tasks include:

- -Reading weather charts;
- -Reading wire service weather reports;
- -Reading air traffic charts and reports;
- -Reading air navigation reports;
- -Operating ground to plane radio equipment;
- -Giving pilot on ground pre-flight information on weather, air traffic, and navigation;
- -Giving pilot in air information regarding course changes, weather in nearby areas, and wind velocity;
- -Aiding pilots in trouble with emergency information;
- -Relaying information from traffic control tower and air route traffic control center to pilot;
- -Relaying information from one pilot to another;
- -Reporting all aircraft in distress to appropriate persons;
- -Keeping records of all contact with aircraft.

JOB CLUSTER #15
"Transportation"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	40	$930-$2,450/mo.	*	$930-$1,155/mo.

*At present, there are 10 salary steps in the Civil Service Salary Schedule.

HOURS OF WORK

The flight service specialist works a rotating eight-hour shift five days a week. He/she may work morning, afternoon, or night shifts, or a combination of these. He/she may also work rotating weekends with days off during the week. There is little overtime work required.

FRINGE BENEFITS

Depending on place and length of employment, you may receive the following:

- retirement plan
- medical coverage
- life insurance
- sick leave
- paid holidays
- paid vacations

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

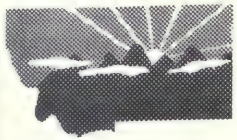
ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Department of Transportation
Federal Aviation Administration
Rocky Mountain Region
10455 East 25th Avenue
Aurora, Colorado 80010
ARM - 14

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Airline-Radio Operator, Chief (Air. Transport)	193.162-022
Air-Traffic Coordinator (Gov. Service)	193.162-010
Chief Controller	193.167-010



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: FLOOR COVERING INSTALLER (LAYER)

The FLOOR COVERING INSTALLER, a skilled building trades craftworker, lays smooth decorative floors. The installer performs all phases of installation including floor preparation, measuring and cutting material and actual installation.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Neat appearance	Mechanical	Good general health
Dependable	Numerical	Physical strength
Courteous		Physical agility
Tactful		Good color perception
Precise and accurate work habits		Full use of arms, legs, hands, and feet

YOU SHOULD KNOW THAT

- -The standard way to become an installer is by completing a formal apprenticeship program;
- -In most areas, floor covering installers are union members;
- -Hazards connected with the trade are knee ailments and colds and rheumatism from continuously kneeling on floors;
- -Persons without strong backs and knees should not consider working as installers.

YOU MUST BE ABLE TO

- -Perform a considerable amount of strenuous labor, including carrying carpets and linoleum rolls which may weigh more than 100 pounds;
- -At times, work all day on your hands and knees and perform such tasks as pushing, pulling, and reaching;
- -Work consistently with speed and care;
- -Work much of the time without direct supervision;
- -Maintain good relations with customers in private homes, offices, and other work sites.

DOT 864.481-010

PREPARATION AND TRAINING:

The floor covering installer should have a high school education. An apprenticeship program is the standard method of obtaining journeyman status.

THE COURSE OF STUDY INCLUDES:

High School: A general course with classes in mechanical drawing, arithmetic, English, and shops such as carpentry and blueprint reading is recommended.

Apprenticeship Program: Combines on-the-job training with classroom instruction in such fields as use of tools, shop mathematics, blueprint reading, fabric types, new materials, and other topics.

ADDITIONAL FACTS ABOUT TRAINING

Many of the floor covering installers now working learned the trade entirely on the job. This method is no longer in general use and the formal apprenticeship program is becoming standard.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities are generally good, although much better in larger cities.

Much of the work is performed on housing construction sites.

Since floor covering is not seasonal, there will always be work replacing floors in existing buildings, homes, and offices.

OPPORTUNITIES FOR ADVANCEMENT

The first promotion is from apprentice to journeyman.

Advancement opportunities for journeymen are limited.

Some are promoted to foreman or estimator after a number of years on the job.

MORE ABOUT THE JOB:

Floor covering installers work with several types of floor coverings. They install and repair the following floor coverings:

linoleum and other sheet goods;
carpets of various types;
resilient tile.

When the worker is installing resilient tile, he/she performs a number of tasks:

-Inspects floor condition;
-If necessary, he/she repairs the floor by sanding or filling;
-When ready, the floor is measured and marked according to the individual plan.

In the installation of carpeting, the installer:

-Inspects the floor;
-Plans the layout of the carpet;
-Installs padding which goes under the carpet;
-Installs the carpet which he/she may or may not have to cut.

Installers may specialize in a particular type of installation such as carpets or tile. All floor covering installers must be familiar with a number of tools such as:

chalk and chalk lines;
measuring and marking tools;
carpet stretching devices;
knives.

JOB CLUSTER #4
"Construction"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$6.50-$9.00/hr	$7.50-$8.00/hr	$6.50/hr

HOURS OF WORK

The standard workweek is forty hours Monday through Friday. There is some occasional overtime.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

health and welfare plans
pension plan
profit sharing
paid vacations and holidays
discounts on purchases
overtime pay

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs.
You may contact a youth representative at your local Employment Service Office

The employment service can provide information on the apprenticeship program.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information.

American Carpet Institute
Empire State Building
New York, New York 10001

Armstrong Cork Company
Lancaster, Pennsylvania 17600

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Soft tile setter (const.)	861.381-034
Carpenter	860.381-022
Glazier (const.)	865.381-010
Painter (const.)	840.381-010
Carpet Layer	864.381-010

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MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: FLOOR COVERING SALESPERSON

The FLOOR COVERING SALESPERSON displays and sells carpeting, padding, vinyl and asbestos tiles, linoleum, and other types of floor covering materials, both to the home owner and to building contractors, businesses, schools and other institutions.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Patient	Verbal	Average health
Neat appearance	Clerical	Good color vision
Attention to detail	Numerical	Average hearing
Interest in home decoration and art		Ability to lift and carry up to forty pounds

YOU SHOULD KNOW THAT

- -You will be expected to have a valid Montana driver's license;
- -Generally, salaries are on a salary plus commission basis;
- -There are few opportunities for part-time work in this field;
- -Firms may vary from the quality house to promotional operators to fly-by-night organizations;
- -The professional sales person has the best opportunity with the quality house.

YOU MUST BE ABLE TO

- -Learn the many types of floor coverings and their particular uses;
- -Have an understanding of the principles of home decoration;
- -Learn about furniture styles and types;
- Correlate colors and understand color harmony;
- -Measure accurately, calculate footage, and read blueprints.

DOT 270.[illegible]

PREPARATION AND TRAINING:

There is no formal minimum; however, all employers prefer at least a high school graduate. Many companies, particularly larger chains with an eye toward future managers, prefer some college and even a four-year graduate in business administration.

RECOMMENDED HIGH SCHOOL SUBJECTS:

The high school course of study might include speech (communicating with people is of primary importance), mathematics (a good command of basic math is necessary in computing areas and costs), art or interior decoration, and sales techniques.

ADDITIONAL FACTS ABOUT TRAINING:

For the student interested in advancing into management of a floor covering firm, a four-year college course with a business administration major, and perhaps an art minor, would be advisable.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Carpeting and floor coverings are sold in cities of all sizes; however, opportunities in cities of under 25,000 are somewhat limited.

The industry, in general, is expanding and the outlook for the future appears good for the qualified sales person.

OPPORTUNITIES FOR ADVANCEMENT:

The salesperson with proven ability and initiative plus good business judgement can advance in many ways. He/she may become sales manager or manager of a retail outlet or a sales representative for a manufacturer. The sales person with exceptional ability in color and design may find opportunities working as a designer for a manufacturer.

MORE ABOUT THE JOB:

The floor covering salesperson helps customers select the carpet or other floor covering which is most suitable in a given situation.

In a store, he/she may:

- -Greet the customers and show samples of floor coverings in which they express interest;
- -Explain styles and materials and compute costs based on room sizes provided by customer;
- -Help the customer find a covering which harmonizes with the particular furniture style, drapery, or color scheme;
- -Assist the customer with credit arrangements or accept cash payment;
- -Visit the customer's home giving advice on home decoration in general as well as taking measurements and sketching floor plans to guide the installer (particularly important when a patterned carpet is used);
- -Go over blueprints of not yet built homes, again figuring costs and yardage as well as helping with the complete decoration.

The commercial salesperson may:

- -Work with contractors, purchasing agents, or other buyers of large amounts of carpet or other floor coverings, again working with blueprints and architectural drawings;
- -Prepare written bids, often competing with other firms;
- -He/she must make very accurate calculations so the company will make money, yet keep the bid low enough to get the job.

JOB CLUSTER #12
"Marketing and Distribution"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40+	$550-$1200/mo	$900-$1000/mo	$550/mo

In many firms, the sales person works on a salary plus commission basis. Salaries may vary widely throughout the state. Check a local source for salaries in your area.

HOURS OF WORK

While the standard workweek is listed as forty hours, the salesperson in effect is his/her own boss. Many sales people work up to 70 hours a week with evening home calls and work on weekends and even some holidays.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

- paid vacation
- sick leave
- health insurance
- life insurance
- retirement plan
- profit sharing
- bonus or merit pay plans

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Employment Security Division
Box 1728
Helena, Montana 59601

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

The National Retail Merchants Association
100 W. 31st Street
New York, New York 10001

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Salesperson, Curtains and Drapery (ret. tr.)	270.357-022
Salesperson, China and Glassware (ret. tr.)	270.357-018
Sales Representative, Home Furnishings (whole. tr.)	270.357-010
Salesperson, Furniture (ret. tr.)	270.357-030

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MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: FLORAL DESIGNERS

FLORAL DESIGNERS create beautiful arrangements to fill all consumer needs. They talk with customers to find out what kind of floral products will best suit customers' needs and then sell the products. They counsel customers on the care of plants and flowers. They make phone calls, wire orders and do other tasks. They hold consultations with people planning weddings, parties and special events, and help individuals plan interior landscapes.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Creative	Numerical	Good hand and finger dexterity
Artistic		Quick deft fingers
Pride in work		Normal color perception
Able to follow instruction		Free from plant allergies
Able to work alone		Normal strength and endurance

YOU SHOULD KNOW THAT

-There are no specific educational requirements for this job;
-Long and irregular hours are the rule, particularly during the winter season;
-Simple bookkeeping and counter sales ability may be required at times;
-There is a great demand for part-time workers for holiday busy seasons.

YOU MUST BE ABLE TO

-Work while standing up for long periods of time;
-Lift moderately heavy loads (25 pounds);
-Do some bending up and down when watering plants;
-Make artistic and creative designs.

D.O.T 142.081-010

PREPARATION AND TRAINING:

A great number of floral designers have very successfully learned their trade by working under the direction of an experienced florist on the job. Formal training is available at any floral designer's school (see your counselor for further information). In all shops, designers must engage in continuous learning in order to keep abreast of new styles in floral arranging and design. If an individual attends floral designer school, he/she usually shortens the period of on-the-job training.

RECOMMENDED HIGH SCHOOL COURSES

Home Economics	Retailing
Bookkeeping	Art
Business English	Design

Any post-secondary training in horticulture or floriculture is recommended.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities are limited in entry positions, although there is always the need for creative designers or those who clearly demonstrate potential.

ADVANCEMENT

With several years experience, advancement to management is a possibility in large stores. Small stores tend to be family operated and advancement is limited.

Experienced designers often open their own businesses.

MORE ABOUT THE JOB:

Duties of the floral designer consist of:

-Cutting flowers and greenery on arrival;
-Checking for substandard or damaged flowers;
-Arranging flowers in artistically effective bouquets;
-Putting flowers on display.

In some shops, duties tend to be more specialized with a supervising designer, for example, dealing with the public. In all shops, designers must engage in continuous learning in order to keep abreast of new styles in floral arranging and design.

JOB CLUSTER #7
"Fine Arts and Humanities"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$140-$280/wk	$225-$240/wk	$140/wk

Salaries will vary through the state. Check a local florist for salary information in your area.

HOURS OF WORK

Normally forty hours a week. Overtime may be required on occasions during peak seasons.

FRINGE BENEFITS

Depending on place and length of employment, you may receive the following:

medical insurance
life insurance
retirement plan
paid vacation
paid holidays

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

A local florist may be able to provide further information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Society of American Florists
901 N. Washington Street
Alexandria, Virginia

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Clothes designer	142.061-018
Furniture designer	142.061-022
Stained glass artist	142.061-054
Package designer	142.081-018

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: FLORIST

The FLORIST arranges fresh or artificial flowers for table settings or decorations. He/she may counsel with customers about parties or weddings to insure the proper flower arrangement for a given occasion. They also care for flowers in bulk before the saleable product is produced.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Neat	Spatial	Good general health
Creative	Clerical	Good color vision
Artistic appreciation	Numerical	Finger dexterity
Pride in work		Eye-hand coordination
Able to deal with the public		Non-allergenic skin

YOU SHOULD KNOW THAT

-Skin allergies or hay fever may prevent you from being employed;
-There are no specific educational requirements for this job;
-Long and irregular hours are the rule at certain times, particularly during the holiday seasons;
-Simple bookkeeping and counter sales ability may be required at times;
-You will receive on-the-job training in floral arrangement and care of plants.

YOU MUST BE ABLE TO

-Work while standing or sitting for long periods of time;
-Lift moderately heavy loads up to twenty-five pounds;
-Bend, stoop, and lift when watering or carrying plants and arrangements;
-Work fast;
-Learn various skills used in floral care and arrangement.

DOT 142.081-010

PREPARATION AND TRAINING:

High school graduation is not required, but most employers prefer candidates who have completed high school. Some college training may be beneficial to the candidate hoping to find quick employment and rapid advancement.

HIGH SCHOOL COURSES MAY INCLUDE:

Business Math
Business Machines
Typing
Speech
Design

COURSES AFTER HIGH SCHOOL:

Art
Ornamental Horticulture
Plant Identification and Materials
Soils
Agronomy
Business Administration

ADDITIONAL FACTS ABOUT TRAINING

You will receive some on-the-job training, usually in the form of supervised instruction from your employer or an experienced florist. Experience with floral design, floral delivery, cultivation, and care of plants and business practices will be helpful and may lead to quicker employment.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities are generally limited in entry positions, although there is a need for creative designers or other talented persons.

Turnover is relatively rapid.

Candidates willing to work hard to learn the floral trade will find employment prospects are good, but only if they can demonstrate eagerness and willingness to work and learn.

ADVANCEMENT

Opportunities for advancement are generally best in large floral shops.

Small shops often are family operated ventures and chances for rising rapidly are extremely limited.

However, experience working in a small shop is still the best way to learn the business.

MORE ABOUT THE JOB:

The florist arranges fresh or artificial flowers for table settings or decorations, for weddings or funerals, and makes corsages and bouquets to order.

He/she may:

-Cut flowers and greenery on arrival at the shop;
-Check for substandard or damaged flowers;
-Arrange flowers in artistically effective bouquets;
-Put flowers on display;
-Do selling, buying, or bookkeeping;
-Handle messages or operate an adding machine.

You should know that:

-Good color perception and artistic ability are keys to success in this job;
-In large shops, tasks are likely to be more specialized;
-In all shops, florists must continuously learn in order to keep up with the new styles in floral arranging and design.

JOB CLUSTER #1
"Agri-Business"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$130-$200/wk	$160/wk	$130/wk

Salaries may vary throughout the state. Check a local source for current information in your area.

HOURS OF WORK

Florists work a regular 8 to 5 day in the shop, but may put in overtime decorating for weddings and special occasions. Hours of work depend a great deal on the season and demand for floral arrangements.

FRINGE BENEFITS
Depending on length and place of employment, you may receive:

paid overtime
Social Security
paid vacations
health insurance
retirement program

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

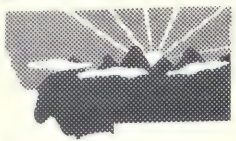
ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Society of American Florists
Sheraton-Park Hotel
Washington, D.C. 20008

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Clothes designer	142.061-014
Furrier	142.081-014
Set Designer	142.061-050



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: FORESTER (Professional)

FORESTERS manage and develop forest lands and ranges for efficient use of resources and for purposes of recreation. Many professional foresters specialize in a particular area of the work such as research or recreation, wildlife, range or hydrology.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Work with people	Clerical	Normal use of hands, arms and legs
Attentive to detail	Numerical	Good physical health
An outdoorsperson	Verbal	Strong and enduring
Responsible		Good eyesight and hearing
Intellectual and industrious		

YOU SHOULD KNOW THAT

- Younger foresters spend the majority of worktime out of doors, while more experienced foresters in supervisory and management jobs spend more time indoors;
- At least four years of college training is required for entry into the field as a professional forester;
- Need for foresters in most areas of the United States is increasing.

YOU MUST BE ABLE TO

- Work outdoors in all kinds of weather;
- Direct the operations of subordinate workers, assistants, forestry technicians, and assume full responsibility for work performed;
- Occasionally spend long hours on the job without rest when, for example, forest fires or other emergencies occur;
- Speak in front of groups effectively.

DOT 040.061-034

PREPARATION AND TRAINING:

The forester must possess the B.S. degree in forestry or a related area to enter the occupational field at the professional level. For some research and most teaching jobs, an advanced degree is desired.

COURSE OF STUDY INCLUDES

High School — A college preparatory major including mathematics, science and a foreign language is recommended.

College — A major in forestry requiring at least four years to complete is recommended. The University of Montana at Missoula has a School of Forestry. Courses in Range are also taught at Montana State University at Bozeman.

ADDITIONAL FACTS ABOUT TRAINING

The student interested in becoming a forester should be aware of his/her feelings for outdoor living. Scouting and related activities can be valuable in this regard. The student should also be aware that the course of study from high school through college graduation is difficult. Good grades and early planning are important.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities for qualified professional foresters are good in Montana. Opportunities exist with the federal, county and state governments, as well as with private employers in the pulp, paper, logging, lumber and milling industries. Future opportunities are expected to remain good for well qualified individuals.

ADVANCEMENT

In federal, state and county civil service systems, advancement opportunities are good up to the middle management level, becoming more competitive for top level jobs.

Opportunities exist for foresters to become specialists in a particular phase of forestry with public agencies as well as with private employers.

Foresters with advanced degrees often become college and university instructors following some work as a practicing forester.

MORE ABOUT THE JOB:

Principal activities performed by those in general forestry include:

- -Planning and supervising reforestation projects, i.e. planting trees on logged or burned over lands;
- -Managing, planning, protecting and/or harvesting the natural resources (water, trees, livestock, wildlife and minerals) for the benefit of mankind without an adverse effect on the other resources;
- -Keeping the public informed about resource or land use activities on an assigned area;
- -Budgeting program finances to maintain an organization;
- -Planning and supervising of forest improvements and facilities such as recreation facilities, range and wildlife improvements, etc.

SPECIALISTS

Wildlife Specialists survey, plan and manage the habitat for the benefit of wildlife such as Big Game, Fisheries, etc.
Range Specialists plan and manage range lands for domestic livestock.
Recreation Specialists plan, administer and maintain recreation areas.
Geologists assist in making land use evaluations determining types of specific uses permitted on a given area.
Realty Specialists determine land values and promote exchanges or acquisition for consolidating landownership.

JOB CLUSTER #1
"Agri-Business and Natural Resources"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	40	$12,000-$21,000/yr	$18,000/yr	$12,000/yr

Private employers tend to pay slightly higher salaries than government agencies.

HOURS OF WORK
Forty hours weekly is standard for working (outdoors) foresters. Hours may be scheduled irregularly (weekends) and overtime is necessary during busy seasons and emergencies such as fires.

FRINGE BENEFITS
Federal employees may receive the following:

Retirement plan	Paid vacations	Life insurance
Paid holidays	Allowance for uniforms	Health insurance

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

For seasonal work, check the Employment Service.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

U.S. Forest Service (Personnel)
Federal Building
Missoula, MT 59801

Department of Natural Resources and Conservation
Division of Forestry
2705 Spurgin Road
Missoula, MT 59801

Society of American Foresters
1010 16th Street N.W.
Washington, D.C. 20036

American Forest Institute
1835 K. Street, N.W.
Washington, D.C. 20006

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Agronomist	040.061-010
Horticulturist	040.061-038
Range Manager	040.061-046

D.O.T. Fourth Edition, page 45

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB:

FORESTRY TECHNICIAN
(D.O.T. FORESTER AIDE)

The TECHNICIAN assists the professional forester in managing and caring for public lands. He/she may also provide technical advice to private forest land owners. His/her work will include obtaining basic field data needed by the professional forester to help him/her make land management decisions.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Dependable and cooperative	Technical	Good vision and color perception
Versatile and willing to follow instruction	Motor coordination	Manual dexterity
Enjoy outside work		Great physical endurance
Communicate well		
Evaluate situations		

YOU SHOULD KNOW THAT

Forestry technicians usually spend considerable time out of doors in all weather conditions. In emergencies, such as fire fighting, you must work many extra hours. If you are interested in seasonal employment, check with the forest service in the fall since there is a deadline for applications.

YOU MUST BE ABLE TO

- -Carry out tasks without direct supervision;
- -Work in remote areas if necessary;
- -Absorb technical information;
- -Evaluate information;
- -Communicate well with others in speaking and writing.

D.O.T. 452.364-010

PREPARATION AND TRAINING:

High school graduation is a must. Most employers prefer completion of at least some college training in a pre-forestry course. You can also get practical work experience with summer jobs.

RECOMMENDED HIGH SCHOOL SUBJECTS

Ag. Science	English	Chemistry
General Science	Biology	Business Math
Drafting	Industrial Arts	Typing

COURSE OF STUDY AFTER HIGH SCHOOL

Forestry Subjects	Plant Identification
Soil Conservation	Recreation Land Management

ADDITIONAL INFORMATION ABOUT TRAINING

You may be able to get part-time work while you are completing your education. There are many such summer jobs in our national parks, national forests, state parks and forests.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

There is expected to be an increase in job openings for forestry technicians. Jobs will be more plentiful for those who have taken a college course in pre-forestry. There are more jobs near mountain areas and public recreation areas.

ADVANCEMENT

If forestry technicians obtain a degree in forestry, they can advance to the job of forester.

MORE ABOUT THE JOB:

As a forestry technician, you may:

- -Estimate the amount, growth and value of timber in a forest by sampling techniques;
- -Mark timber for harvesting;
- -Prune trees to improve the quality of the timber;
- -Collect information on the condition of water shed projects;
- -Investigate causes of stream and lake pollution;
- -Conduct road surveys and maintain forest trails;
- -Supervise timber operations;
- -Manage recreation facilities;
- -Make range and wildlife surveys;
- -Fight fires;
- -Construct and install range and wildlife improvements.

You may also be engaged in all phases of fire prevention and control. Some are employed in laboratories to assist scientists in tests and experiments to discover ways to expand the utilization of forest products.

JOB CLUSTER #1
"Agri-Business and Natural Resources"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$8,000-$12,000/yr	$9,000-$11,000/yr	$8,000/yr

Federal salary depends on the applicant's education and experience.

HOURS OF WORK
In emergencies, forestry technicians work many extra hours. During summer months, employees may live in outlaying areas.

FRINGE BENEFITS
Depending on place and length of employment, you may receive the following:

- paid vacation
- retirement plan
- life insurance
- sick leave
- health insurance
- paid holidays
- periodic pay raises, if employed by the federal government

VV10579

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information.

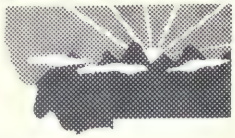
U.S. Forest Service
Federal Building
Missoula, MT 59801

Department of Natural Resources and Conservation
Division of Forestry
2705 Spurgin Road
Missoula, MT 59801

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Feed Research Aide (grain and feed mill)	049.364-010
Tree Surgeon (agricultural)	408.181-010
Landscape Gardener	408.161-010

D O T. Fourth Edition, page 284



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB:

FORKLIFT OPERATOR
(D.O.T. INDUSTRIAL TRUCK OPERATOR)

FORKLIFT OPERATORS or POWER TRUCK OPERATORS move raw materials and products, using various types of power trucks which carry tons of material and lift it as much as eighteen feet in the air.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Dependable	Average manual dexterity	Good general health
Thorough	Mechanical	Good eye-hand coordination
Careful work habits	Numerical	
Interest in mechanics	Able to judge distance with speed and accuracy	
Able to work in a variety of situations	Clerical	

YOU SHOULD KNOW THAT

- -Forklift operators are exposed to certain hazards: falling objects and vehicle collisions;
- -Safety in work practices is important and necessary in this field;
- -Many forklift operators are members of labor unions; membership is determined by the nature of the industry and the employer.

YOU MUST BE ABLE TO

- -Pass a physical examination to be employed by most employers;
- -Perform simple maintenance work on the power truck;
- -Work in or out of doors;
- -Perform simple record keeping tasks;
- -Work in conditions that are at times dusty and dirty

DOT 921.683-050

PREPARATION AND TRAINING:

There are no specific educational requirements set for entry into this field. For those who want the best chance of finding a job, a high school diploma or G.E.D. certificate is strongly recommended.

RECOMMENDED HIGH SCHOOL COURSES:

Commercial Arithmetic	Driver Training
Business English	Shops of all kinds

ADDITIONAL FACTS ABOUT TRAINING

An interest and ability in mechanics will be helpful in preparing yourself for a job as a forklift or power truck operator. A school and/or work record which demonstrates regular dependable habits and attendance are important in preparing for a job as a forklift or power truck operator.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Employment opportunities are with warehouses and industries that require movement and storage of raw materials and products.

Opportunities for employment in Montana are limited.

ADVANCEMENT

Opportunities for advancement for the forklift or power truck operators are limited.

Operators may become materials movement supervisors, and some become stock or shipping clerks.

MORE ABOUT THE JOB:

Industrial truck operators do today what was formerly done by hand methods in the moving of materials from place to place in a factory or construction site. They operate self-powered trucks which move tons of material. The trucks are equipped with forks to lift and tow bars to pull.

Industrial truck operators perform a number of tasks directly concerned with vehicle operation:

- -They start and stop trucks;
- -They work the lifting mechanisms which are part of their trucks;
- -They use foot pedals and hand levers in the operation of their equipment;
- -Operators drive their equipment forward and backward.

Operators also perform some tasks related though not directly classified as those of operation:

- -They keep records of materials moved;
- -They do some manual or hand loading or unloading;
- -They maintain their trucks by checking such things as batteries, oil, water, and other parts and conditions required to keep the trucks working effectively;
- -They make simple repairs and adjustments.

Drivers or operators must use skill and care in the following:

- -Driving in aisles;
- -Loading and removing materials from stock;
- -Figuring how high materials may be stacked and the individual truck capacity.

JOB CLUSTER #4
"Construction"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	Journeymen Wage $11.72/hr		

Salaries may vary throughout the state. You may wish to check a local source for salary information in your area.

HOURS OF WORK

The normal workweek is forty hours. Overtime may occur when work schedules fall behind.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

- paid vacations
- paid holidays
- health plan
- retirement plan
- extra pay for overtime worked
- life insurance

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

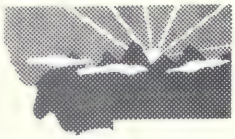
Employment Security Division
P.O. Box 1728
Helena, Montana 59601

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Hydraulic Boom Operator	921.683-046
Jammer Operator	921.683-054
Skip Operator	921.683-062
Front End Loader Operator	921.683-042



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: FRAME ATTENDANT (TELEPHONE)

The FRAME ATTENDANT connects wires from telephone lines and cables to distributing frames in telephone company central office, using soldering iron and hand tools:

-solders connections, following diagram or oral instructions
-strings distributing frames with connecting wires
-tests circuit connections, using voltmeter or ammeter
-removes and remakes connections to change circuit layouts
-cleans switches and replaces contact points, using vacuum hose, solvents and hand tools
-lubricates moving switch parts
-assists TROUBLE LOCATOR in locating and correcting malfunction in wiring on distributing frame.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Courteous	Mechanical	Good finger dexterity
Adaptable	Numerical	Above average agility
Resourceful	Clerical	Good eye-hand coordination
Neat		Ability to distinguish color
Careful work habits		
Attention to detail		

YOU SHOULD KNOW THAT

-telephone company work is stable and not subject to severe business fluctuations
-you must pass a physical examination, aptitude tests, and personal interviews to be employed
-a personal record free of law violations other than minor traffic violations is required for employment by telephone companies

YOU MUST BE ABLE TO

-work with all kinds of hand tools accurately with set standards
-follow written and spoken instructions carefully
-follow set procedures in your work and repeat the same operation many times over in the course of a day
-work in noisy, drafty situations

DOT 822.684-010

PREPARATION AND TRAINING:

The frame attendant should be a high school graduate or have its equivalent. He/she should have some knowledge of the major principles of electricity. The frame attendant can benefit from any college training regardless of the course content. He/she will receive considerable on-the-job training which includes regular programs of instruction covering many aspects of the frame attendant's job.

RECOMMENDED HIGH SCHOOL COURSES: English, Shop Courses, Mathematics, Physical Science, Electricity

ADDITIONAL FACTS ABOUT TRAINING

Training given in the armed services in communications craft work is a help in qualifying for employment as a frame attendant. Hobbies dealing with electricity and its principles give good background.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY AND TRENDS

Job opportunities will remain good throughout the next decade, but will be replaced by automation soon after.

Work is usually in central offices of telephone companies.

ADVANCEMENT

Advancement is usually to central office repairer or test board person.

With additional training and instruction, the frame attendant may advance to central office supervisor.

MORE ABOUT THE JOB:

Frame attendants are central office crafts people who handle the connecting and disconnecting of customers' lines to switchboards.

Frame attendants have a number of duties such as:

-connecting wires from telephone lines and cables to distributing frames in a central office
-soldering connections using diagrams and from spoken instruction
-stringing distribution frames with wires
-changing circuit layouts by remaking and removing connections
-making tests of customers' lines
-tracing terminal lines of customers' service
-running checks for faulty fuses and connections when telephone problems are reported

JOB CLUSTER # 13

"Communication and Media"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$185-$285/wk	$185-$216/wk	$185/wk

Salaries may vary some throughout the state. Check with your telephone office for accurate salary information.

HOURS OF WORK

The standard workweek is forty hours. Some frame wirers work nights and weekends because of the continuous service which telephone companies give.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

- profit sharing plans
- paid vacations
- group hospitalization
- groups life and disability insurance
- company schooling
- pension plan

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Contact your local phone company for further details.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Alliance of Independent Telephone Unions
Room 302
1422 Chestnut Street
Philadelphia, Pennsylvania 19102

Communication Workers of America
1925 K Street, N.W.
Washington, D.C. 20006

RELATED OCCUPATIONS:

See Dictionary of Occupational Titles, page 834, "Occupations in Assembly, Installtion, and Repair of Wire Communication, Detection and Signaling Equipment."

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: FUNERAL DIRECTOR

The FUNERAL DIRECTOR arranges and conducts funerals, usually working with members of the family. In small establishments, the embalmer and funeral director are one and the same person; in large organizations, they specialize.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Emotionally stable	Retentive memory	Good physical and mental health
Emotionally mature	Sense of form	Average physical strength
Sensitive	Finger dexterity	Good eyesight
Tactful	Verbal facility	Full use of arms, fingers, and legs
Courteous		
Sincere		
Honest		

YOU SHOULD KNOW THAT

- In a small organization, the owner-funeral director usually has long irregular hours including nights, holidays, and Sundays.
- Persons desiring to make funeral services their chosen career should be of exceptional emotional maturity and stability.
- It is important for the prospective student to obtain the latest information concerning the requirements for licenses from the state board of embalmers and funeral directors in the state in which he/she plans to practice.

YOU MUST BE ABLE TO

- Work irregular hours and be on call;
- Serve people as they want to be served, and be ready to sacrifice your own personal desires and comforts to help them in time of need;
- Master the subjects taught in the funeral service course;
- Organize and handle numerous details;
- Meet people and be able to win and retain their confidence.

DOT 187.167-030

PREPARATION AND TRAINING:

A high school diploma is required to enter embalming school which lasts nine to twelve months. One or two years of apprenticeship after the completion of an embalming school program are required for licensing.

Embalming schools frequently assist students to find part-time work in mortuaries to help finance their studies. A number of these schools offer scholarships to deserving students and some have student loan funds.

RECOMMENDED HIGH SCHOOL COURSES:

English, Public Speaking, Science

CURRICULUM OF EMBALMING SCHOOL INCLUDES:

- Anatomy
- Physiology
- Pathology
- Bacteriology
- Hygiene
- First Aide
- Embalming
- Restorative Art
- Cosmetology
- Barbering
- Application of Cosmetics
- Use of Lighting Effects
- Chemistry
- Mortuary Administration
- Mortuary Law

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Well-trained funeral directors are and will continue to be needed; however, opportunities in Montana are limited.

OPPORTUNITIES FOR ADVANCEMENT

In a small home, opportunities are limited.

There are several advancement possibilities for the funeral director in a medium sized or large funeral home. He/she may become assistant manager, personnel director, or even the owner.

MORE ABOUT THE JOB:

The duties of the funeral director begin with notification of a death. He/she immediately arranges for the body to be taken to the funeral home. The director may move the body, or in a large establishment have assistants do so. As soon as possible, he/she obtains from the family information necessary for the death certificate which he/she will file for the obituary notices.

Since funeral directing is as much a service for the living as it is care for the dead, the funeral director then makes an appointment with the relatives to discuss what type of service and burial will be held. He/she helps the family select the casket and purchase a cemetery plot if this has not already been done. He/she advises them on Social Security, insurance, and other claims if they have not already sought legal or other counsel on these matters.

Once the family has made its decisions, the funeral director carries out all arrangements. These may include opening a grave in a family plot, notifying pallbearers, selecting clothing, notifying the newspaper and organizations to which the deceased belonged, and contacting the clergy and organist.

During the service and before, the director greets members of the family and friends and is on hand to see that the entire service runs as smoothly as possible. He/she provides transportation for the family and pallbearers if necessary. Throughout, the funeral director must provide the kind of service the family wishes and have a complete knowledge of the business and professional aspects of a funeral.

JOB CLUSTER #13
"Personal Services"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
Irregular	$16,000 - $20,000/year		

Check local funeral home for specific information on salaries.

HOURS OF WORK

Many work long irregular hours. If the director owns and operates the business, he/she is on call twenty-four hours a day.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

- extra commissions
- bonuses
- profit sharing plan
- sick benefits
- insurance premiums

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Your local funeral home can provide you with additional details.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

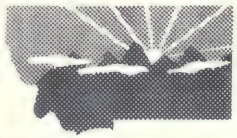
San Antonio College
Department of Mortuary Science
1300 San Pedro Avenue
San Antonio, Texas 78212

National Funeral Director's Association
135 Wells Street
Milwaukee, Wisconsin 53203

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Director, Volunteer Services	187.167-038
Embalmer	338.371-014
Program Director, Group Work	187.117-046
Director, Service (ret. tr.)	189.167-014

D.O.T Fourth Edition, page 128



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: FURNACE INSTALLER

FURNACE INSTALLERS, using blueprints or other specifications, install oil, gas, electrical wiring, and controls necessary for the operation of these units.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Get along well with others	Mechanical aptitude	Good eyesight (natural or corrective)
Good judgement	Spatial	Stamina
Organization	Form perception	At least average strength
Responsibility	Numerical	Agility
Prefer working with tangible objects		Manual dexterity

YOU SHOULD KNOW THAT

-Possible hazards include electrical shock, burns and muscle strains;
-You may have to work from awkward or cramped positions.

YOU MUST BE ABLE TO

-Use a variety of tools;
-Read blueprints;
-Learn and apply craft techniques.

DOT 862.361-010

PREPARATION AND TRAINING:

You should be a high school graduate.

Helpful high school courses include:

mathematics	blueprint reading
physics	machine shop

When available, a vocational trade and industrial education course is recommended.

Skills are acquired through either on-the-job training or four-year apprenticeship programs.

Apprentices are employed on a ratio with journeymen. This is to insure proper training. Union apprentices are required to attend school evenings on their own time, possibly two nights per week for four years. Any past experience or training experience pertaining to sheet metal work is given consideration in the rating of apprentices for employment.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Future demands should increase with the expansion of businesses and home building.

At the present time, there is a demand for furnace mechanics in Montana and it looks good for the future.

OPPORTUNITIES FOR ADVANCEMENT

Opportunities for advancement may include: foreman, maintenance manager, service manager.

Some furnace installers with experience and capital go into business for themselves.

MORE ABOUT THE JOB:

Specific duties of the furnace installer include:

-Installing and repairing hot-air furnaces;
-Building concrete foundations;
-Assembling and positioning heating units;
-Cutting holes in floors and walls to form air-duct outlets;
-Installing fuel pipes;
-Wrapping insulating asbestos around air-ducts;
-Connecting and adjusting timers and thermostats;
-Inspecting inoperative heating units to determine trouble;
-Replacing or repairing defective parts in heating units;
-Cuts, crimps, and bends sheetmetal to repair furnaces;
-Layout of fittings and duct work plus fabrication of same.

The furnace installer uses the following equipment:

diagrams and specifications	drills	snips
pipe-threading	punches	pipe wrenches
crimpers	handbrakes	sheetmetal hammers

Part of the job includes lifting, loading and cleaning furnaces. The Apprentice assists in installation of ductwork right from the start.

JOB CLUSTER #13
"Personal Service"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	40	Salaries range from $8.00-$13.00/hour		

For salary information in your area of the state, check with your local employment office or with the appropriate local union office.

HOURS OF WORK

Forty-hour workweek is normal. Work may be seasonal with busiest periods in the fall and winter. A good residential worker with the ability to do service work on furnaces and air conditioners can look forward to overtime.

FRINGE BENEFITS

Depending on length and place of employment, you may receive the following:

medical and life insurance plans
retirement plans

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Speak to a local furnace installer or to a dealer handling furnaces, air conditioners, etc.

Contact the Local Sheet Metal Workers Union Business Manager or Apprentice Coordinator.

ADDITIONAL SOURCES OF INFORMATION:

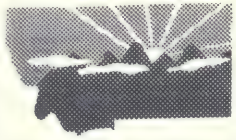
Your school counselor and librarian may also help you find additional information.

Education Department
National Oil Fuel Institute
60 East 42nd Street
New York, New York 10017

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Gas Main Fitter	862.361-014
Coppersmith	862.281-010
Steam Service Inspector	862.361-022

D.O.T. Fourth Edition, page 860



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: FURNITURE SALESPERSON

FURNITURE SALESPEOPLE sell all lines of household furniture such as couches, chairs, bedroom sets, dinettes, and tables. They work in furniture stores or large department stores.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Neat appearance	Verbal	Good general health
Dependable	Clerical	Able to stand for long periods of time
Creative	Numerical	

YOU SHOULD KNOW THAT

-In most stores, the salesperson works on a set salary plus commission based on a 40 hour week.

YOU MUST BE ABLE TO

-Know about the many styles and designs of furniture and accessories;
-Know the principles of interior decoration.

DOT 270.357-030

PREPARATION AND TRAINING:

The furniture salesperson learns most of the duties on the job. It is necessary to become familiar with various designs, styles, period furnishings, types of construction and upholstery fabrics. Only experience will fully develop good sales techniques. However, education, both in high school and in college, can provide some solid background.

RECOMMENDED HIGH SCHOOL SUBJECTS:

Sales	English
Retailing	Speech
Home Decoration	Art

Remember, the potential customer is a lot less likely to rely on the salesperson whose grammar or speech is shoddy.

POST HIGH SCHOOL TRAINING:

Business Math	Marketing
Introduction to Business	Advertising
Consumer Problems	Business Law
Accounting	Sales
Economics	Human Relations in Business

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

The long range outlook for the eager qualified salesperson is likely to remain good.

OPPORTUNITIES FOR ADVANCEMENT

In a large store, the furniture salesperson may become a sales manager or may become a wholesale goods or a manufacturer's representative.

Retail selling is one of the few fields in which a person with initiative and ability, regardless of education, may be promoted to higher level positions.

MORE ABOUT THE JOB:

The furniture salesperson sells the basic furnishing and decorative accessories which form the environment of each home.

They may work in a furniture store, or in one or more specialized areas of a department store. Some duties are to meet customers, show them what merchandise the company has in stock and assist the customer in choosing special order merchandise.

The furniture store employee usually sells all items in the store: lamps, tables, carpeting, sofas and bedroom sets; but the department store employee may specialize in one area: carpeting and floor coverings, bedroom furniture, living room groups, hi-fi, stereo and T.V., draperies, or the like.

The more the home furnishings salesperson knows about interior decorating principles, the better he/she will be able to assist the customer in planning a purchase.

Once a sale is made, the furniture salesperson is responsible for preparing a sales ticket. After a sale is made you have a credit department that arranges payment. Also, most stores have a delivery manager that arranges deliveries.

The salesperson may also take inventory of stock on the floor during the periods when business slacks off. Assistance may be required in the pricing of merchandise and marking special sale items.

JOB CLUSTER #12
"Marketing and Distribution"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
		$502-$1199/mo	$750-875/mo	$502/mo

Salaries paid furniture salespeople may vary widely from firm to firm, depending on whether it is straight salary or on commission. You may wish to check a local source.

HOURS OF WORK
The forty hour workweek is standard, but working hours vary considerable, particularly in stores which are open seven days a week and in the evening several times a week. Overtime is common. Progressive and larger stores have a work rotation set-up enabling employees to alternate working weekends.

FRINGE BENEFITS
Depending on length and place of employment, you may receive:

- paid overtime
- paid vacation
- retirement plan
- sick leave
- profit sharing
- health insurance
- employee discounts

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Employment Security Division
Box 1728
Helena, Montana 59601

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

The National Retail Merchants Association
100 W. 31st Street
New York, New York 10001

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Floor Coverings Estimator (ret. tr.)	270.357-026
Salesperson, Custom Drapery (ret. tr.)	270.357-022
Salesperson, China and Glassware (ret. tr.; whole. tr.)	270.357-018

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: FURNITURE UPHOLSTERER

FURNITURE UPHOLSTERERS are skilled workers who cut and sew fabrics, install springs, arrange padding and fasten covering material to frames for household and office furniture and for bus, train, airplane and automobile seats.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Orderly work habits	Mechanical	Good general health
Artistic appreciation	Numerical	Good vision (natural or corrected)
Prefer routine tasks	Manual dexterity	Able to distinguish differences in colors
Able to follow instructions		Good eye-hand coordination

YOU SHOULD KNOW THAT

- -Workers with some physical handicaps can perform some of the upholsterer's tasks and many are employed in the occupation of doing specialized tasks;
- -Hazards include cuts from using various cutting tools and machines;
- -The work is somewhat seasonal, but well qualified all around upholsterers have little difficulty in finding work in any area, any time of the year.

YOU MUST BE ABLE TO

- -Work while standing a major part of the day;
- -Work speedily using several types of small tools including power tools;
- -Coordinate your work closely with that of other upholsterers;
- -Perform your work accurately in conformance with exacting standards;
- -Perform physically strenuous work requiring pushing, pulling and some heavy lifting.

DOT 780.381-018

PREPARATION AND TRAINING:

Upholsterers need not have a high school education, though it is preferred.

Upholsterers sometimes learn the trade through a formal apprenticeship or through informal training on the job over a period of years.

COURSE OF STUDY INCLUDES:

High School: Wood and other shop courses, geometry, general science, and home economics are recommended.

Apprenticeship and On-the-Job: In both, simpler skills are practiced and more complex tasks are added with experience.

ADDITIONAL FACTS ABOUT TRAINING

Those who train in a more formal apprenticeship program are likely to progress faster to fully qualfied status than are those with strictly on-the-job training. In manufacturing plants which employ many workers, training requirements are less rigid and workers may qualify for a specialty in upholstering in a relatively short time.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Upholsterers, apprentice upholsterers, and helpers are employed by small shops which do repair and custom work and by manufacturers which may employ more than ten workers.

Experienced upholsterers usually have little difficulty finding employment.

ADVANCEMENT

Fully qualified upholsterers can advance to supervisory positions in large shops.

Upholsterers with money to invest and a good knowledge of business practice can own their own shops.

MORE ABOUT THE JOB:

The work of the furniture upholsterer involves several tasks. In larger operations, workers tend to specialize in one or a few tasks.

The basic tasks performed in most upholstering operations include:

-Attaching and securing strips of webbing or solid webbing to the undersides and back of the piece to be upholstered;
-Fastening springs to the webbing by hand and covering the springs with burlap;
-Putting padding, followed by a covering material, over the burlap;
-Fitting on the final upholstering material and tacking it in place on the frame;
-Doing final finishing work, such as covering the arms, putting on braid and flounces, and any other necessary finishing operations.

The fully qualified upholsterer can perform all of the above operations and may do so in a small shop. In large production shops, the journeyman will likely supervise the less skilled helpers and apprentices and other production workers who will perform one operation each.

Tools and materials used by furniture upholsterers in the various phases of the process include: hand shears; cutting machines; tacks; hammers; pliers; scissors; electric staplers; power sewing machines; upholsterer's needles and webbing stretchers.

JOB CLUSTER #9
"Manufacturing"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$6.45-$10.00/hr		$6.45/hr

Some highly skilled upholsterers earn higher wages.

HOURS OF WORK

The normal workweek consists of forty hours, Monday through Friday. Many upholsterers work an additional four hours on Saturdays.

FRINGE BENEFITS
Depending on length and place of employment, you may receive:

paid vacations and holidays
health and welfare plans

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Upholsterers International Union
1500 North Broad Street
Philadelphia, Pennsylvania 19121

National Association of Furniture Manufacturers
666 North Lakeshore Drive
Chicago, Illinois 60611

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Slipcover cutter	780.381-034
Patternmaker (furniture and garment)	709.381-034
Oriental rug repairer	782.381-014
Fur finisher	783.381-014
Shoemaker, Custom	788.381-014

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MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: GAME WARDEN

GAME WARDENS patrol lands and waters of the State of Montana to enforce state and federal fish, game wildlife conservation laws and regulations with regard to licenses, bag limits, species, boat safety, litter, vandalism, snowmobile licensing and safety, park and recreation area regulations; check hunters, investigate hunting accident reports, investigate and obtain evidence in court; trap and transplant animals; supervise trappers, promote good relations between landowners and sports enthusiasts; conduct classes in hunter safety; conduct wildlife damage control programs; and perform other duties assigned.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Enthusiastic	Verbal	Good general health
Liking for wildlife	Numerical	Physically fit
Deep and sincere interest in nature and outdoors	Scientific	Average or above physical strength and endurance
Be interested in people		Normal vision and hearing
		Above average physical stamina
		Full use of hands, arms and fingers

YOU SHOULD KNOW THAT

Game Wardens Should:

Be a citizen of the United States; be a bona fide resident of the State of Montana one year prior to application; be between the ages of 21 and 35 years of age on date of appointment; be free of any felony convictions; be of good moral character as determined by a thorough background investigation; and be examined by a licensed physician or surgeon and meet the physical requirements as established by the Fish and Game Commission.

YOU MUST BE ABLE TO

Work outdoors under extreme weather conditions;
Do strenuous physical labor for prolonged periods;
Live in remote areas without modern conveniences and facilities for extended periods of time;
Understand human relations and be able to communicate with people.

DOT 379.167-010

PREPARATION AND TRAINING:

Some positions are filled by high school graduates who have had basic and advanced courses in zoology and botany.

Minimum education requirement for many positions in this career field is a bachelor's degree in the wildlife field or in related fields such as forestry and agriculture.

All applicants shall be required to take a written fish and game examination and pass an oral interview. No applicant shall be certified for appointment until having passed all examinations and the final investigation of character. Successful applicants will be listed by composite rank, based on the scores attained in all examination.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Employment opportunities are not abundant at the present time.
There are a few openings with federal agencies such as the Fish and Wildlife Service, the Forest Service, the National Park Service, the Bureau of Indian Affairs, the Soil Conservation Commission, and the Corp of Engineers.
The United States Army employs a limited number of persons trained in this field.

ADVANCEMENT

Advancement prospects are not as great in this field as they may be in some other career areas.
Advancement is usually in the form of pay increases.

MORE ABOUT THE JOB:

The duties of the Fish and Game Warden may include:

patrolling assigned areas to prevent game law violations;
investigating reports of damage to crops and property by wildlife and compiling biological data;
traveling through area by car, boat, airplane, horse and on foot to observe persons engaged in taking fish and game to insure method and equipment used are lawful and to apprehend violators;
investigating reports of fish and game law violations and issuing warnings and citations;
serving warrants, making arrests, and preparing and presenting evidence in court action;
seizing equipment used in fish and game law violations and arranging for disposition of fish and game illegally taken or possessed;
addressing schools and civic groups to disseminate information and promote public relations.

JOB CLUSTER #14
"Public Service"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$900-$1200/mo		$900/mo

Check with the Fish and Game Department for further salary information.

HOURS OF WORK

Forty-hour workweek is usually minimum. There will be a considerable amount of night work and weekends with time off during the week.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

paid vacations
sick leave
retirement plan
paid holidays
group insurance

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

"A Career for You in Wildlife Conservation"
Wildlife Society
2000 P Street, Northwest
Washington, D.C. 20036

Fish and Wildlife Service
U.S. Dept. of the Interior
Washington, D.C. 20240

National Wildlife Federation
1412 16th Street, N.W.
Washington, D.C. 20036

RELATED OCCUPATIONS:

JOB TITLE:	D.O.T.#:
Ranger	169.167-042
Firefighter	373.364-010
Police Officer	375.263-014
Guard, Security	372.667-034
Detective	375.267-010
Highway Patrol	375.263-018
Fingerprint Classifier	375.387-010
Sheriff/Sheriff Deputy	377.263-010
Probation Officer	195.167-034

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MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: GARBAGE COLLECTOR

The GARBAGE COLLECTOR loads and transports garbage from homes and businesses to city dumps or incinerators.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Able to follow instructions	Ability to reason and make judgments	At least average physical strength
Able to get along with co-workers		Good muscular development
Enjoy outside and physical work		Average eyesight (natural or corrected)
Have a preference for activities of a routine organized nature		Full use of hands and feet

YOU SHOULD KNOW THAT

-you have to work outdoors almost all of the time.
-you may be required to drive a large truck.
-you should not mind dirt and bad smells.
-garbage has to be collected, even though it is very hot or cold or raining.

YOU MUST BE ABLE TO

-lift heavy cans and empty them into a truck.
-follow instructions.
-work with your hands.
-in some cases, drive and find your way around the city in which you work.

DOT 909.687-010

PREPARATION AND TRAINING:

Employers usually prefer that the applicant have a high school or equivalency certificate. There is no previous training required.

The work is taught by a supervisor while on the job. The employer will consider the worker's record of reliability, honesty and industry. The interview is most important in hiring in this job.

Health and physical education classes will benefit in training for this job.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

There are more people in the United States than ever before and the population is still growing. With more people, more garbage collectors will be needed. Opportunities exist with both municipal agencies and individually owned concerns.

ADVANCEMENT

Advancement is usually in the form of pay raises.
With enough capital, a collector may go into independent business.
Recycling and source separation are emerging fields in which pick-up, collection and separation workers are needed. The demand for workers should increase between 1980-90.

MORE ABOUT THE JOB:

Duties of a garbage collector include:
collecting refuse on a designated route;
dumping the refuse into the truck or a refuse bin in back of the truck;
may drive the truck;
may operate a hoisting device that raises the refuse bin and dumps contents into an opening in the enclosed bed of the truck;
may supervise other workers engaged in collecting garbage and other refuse;
may assign routes and trucks to other workers;
may sometimes work alone and have to drive truck as well as pick up and empty cans.

JOB CLUSTER #6
"Environment"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	Beginning salary is $783/month		

Salaries will vary throughout the state. You may wish to check a local source for accurate salary quotes for your area.

HOURS OF WORK

The forty-hour workweek is standard. There could be early morning hours.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

hospital insurance	life insurance
paid vacation	retirement plan
paid holidays	sick leave

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs.
You may contact a youth representative at your local Employment Service Office

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

American Trucking Association Incorporated
1616 P Street Northwest
Washington, D.C. 20036

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Furniture mover	905.663-018
Septic tank servicer	869.664-014
Furnace cleaner	891.687-014
Tank cleaner (any ind.)	891.687-022

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: GEOLOGIST

GEOLOGISTS study the structure, composition and history of the earth crust to find natural resources, give warnings of natural disasters, and determine whether land will support large buildings or other structures. Geologists do fieldwork (including explorations), laboratory and field research, teaching, and consulting. Many geologists specialize in one of these or closely related activities, but they seldom restrict their work to a single specialty.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Mentally alert	Scientific	Good general health
Good memory	Numerical	Stamina
Accurate	Some mechanical	Normal vision and hearing (natural or corrected)
Thorough	Some clerical	
Pride in work	Some verbal	Ability to lift heavy objects
Enjoy outdoor work	Finger dexterity	Eye-hand coordination

YOU SHOULD KNOW THAT

You will do work both in the field and in the laboratory.
The usual minimum is a master's degree and the doctorate is often required for advanced positions.
Geologists work for private industry, government agencies and universities.
Most geologists specialize in one branch of the field such as economic geology, petroleum geology, sedimentology or paleontology.

YOU MUST BE ABLE TO

Learn, absorb and apply large amounts of scientific and technical information;
Learn to use complex instruments such as X-ray diffractometers and petrographic microscopes;
Stand working outdoors, often on hot days, and in a laboratory;
Complete five to seven years of post high school training with good academic records;
Life some heavy objects, usually large rocks and other specimens.

DOT 024.061-018

PREPARATION AND TRAINING:

The general minimum educational requirements for employment as a geologist are completion of a college preparatory high school course with good academic average; completion of a four-year college program with emphasis on the sciences; and completion of a post graduate master's program in geology.

For advanced positions, most employers require a doctorate.

There are a very limited number of openings for persons with only a baccalaureate degree.

RECOMMENDED HIGH SCHOOL SUBJECTS: Biology, Chemistry, Physics, Mathematics, History

COLLEGE COURSES:
The college student should include courses in mathematics, natural sciences, geological sciences, and engineering.

ADVANCED INSTRUCTION:
The college graduate seeking a master's degree will be given advanced training with major emphasis on geological sciences and more specifically with much time spent on a specialty area.

ADDITIONAL FACTS ABOUT TRAINING
Upon employment, you will receive some on-the-job training, usually in the form of working under the supervision of an experienced geologist. Candidates with only the bachelor's degree will find the best opportunities lie in secondary school teaching. Many high schools today offer earth science courses.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Most opportunities are with private industry.
Opportunities are good in most areas, but remember that while a firm's main office is in a large city, you may be stationed in deserted or sparsely populated areas to carry on research.

OPPORTUNITIES FOR ADVANCEMENT

Advancement can take many forms. It can come as:
increase in pay;
supervision of geological projects;
consultant work to firms;
lecturing at large universities;
contributing to professional magazines.

MORE ABOUT THE JOB:

The geologist:
- spends much time in the field studying the earth & obtaining rock samples and other specimens;
- studies rock cores, cuttings from deep holes, minerals, fossils, and other specimens;
- spends considerable time in the laboratory studying specimens;
- analyzes geological materials under controlled temperature and pressure;
- uses a variety of complex instruments including the X-ray diffractometer to determine the structure of minerals and the petrographic microscope to study the processes of rock formation;

Areas of specialization include:
- Economic geology: the development of mineral and fuel resources;
- Petroleum geology: the recovery of oil and natural gas;
- Engineering geology: applying knowledge to problems of roads, dams and other structures;
- Stratigraphy: the study of sedimentary rock formations;
- Sedimentology: the study of the formation of sedimentary rock including processes and products involved;
- Paleontology: the study of fossils found in rock;
- Petrology: the study of the origins of rock masses;
- Mineralogy: the study of minerals;
- Geomorphology: the study of the form of the earth and the forces which change it, including erosion and glaciation.

Additional areas include geochemistry and astrogeology.

JOB CLUSTER #6
"Environment"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	Salaries range from $1,404 to $1,848/month. Exact rates depend on academic records. Salaries are usually somewhat higher in private industry than in governmental service or education.		

HOURS OF WORK

The geologist usually works about forty hours a week, although this figure can vary greatly depending on the type of employer and duties. The work is active and strenuous, and overtime and weekend work is not uncommon.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

retirement plan	paid vacations	paid holidays
health plan	life insurance	expense account
furnished transportation	sick leave	

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

American Geological Institute
2201 M Street, N.W.
Washington, D.C. 20037

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Crystallographer (clock & watch)	024.061-010
Geophysicist (Profess. & kin.)	024.061-030

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: GLAZIER

GLAZIERS cut glass and mirrors to correct size, smooth, polish and install glass in buildings, homes, furniture, automobiles, and boats, fabricate and install metal entrances and metal store fronts.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Dependable Accurate Precise Able to follow instructions	Mechanical	General good health Average or above physical strength Physical endurance Normal vision and hearing Full use of hands and fingers

YOU SHOULD KNOW THAT

- -Glaziers are exposed to some hazards in their work such as cuts from glass edges and sharp tools used in cutting glass, back injuries caused from lifting plate glass, and falls from scaffolding;
- -Glaziers may be designated according to the type of glass installed;
- -Many glaziers work in new construction under union contracts.

YOU MUST BE ABLE TO

- -Learn to use a variety of glazier's hand tools and power tools;
- -Select correct type of glass for specific jobs;
- -Judge how much tension, pressure, stress, and strain different types, sizes, and thicknesses of glass can absorb without being broken;
- -Learn blueprint reading.

D.O.T. 865.381-010

PREPARATION AND TRAINING:

A high school education is recommended, with a good knowledge of math.

Most training authorities recommend the completion of an apprenticeship program as the best way to learn the skills of the glazier.

A substantial number of glaziers, however, have learned the trade informally. They have acquired their skills by working for many years with experienced glaziers and observing or being taught by them.

In smaller communities, many journeymen painters and paper hangers have learned to do glazier work as part of the apprenticeship for their trade.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

The turnover rate is generally low in this occupation; however, job opportunities will result from the need to replace experienced glaziers who retire or transfer to other fields of work.

The competition for available positions for untrained glaziers is high, but if young people are interested in this occupation, they should not find it extremely difficult to find training and employment.

ADVANCEMENT

Advancement may be from apprentice to advanced apprentice to journeyman.

MORE ABOUT THE JOB:

The glazier in construction work installs glass in windows, skylights, store fronts, and display cases, or on surfaces such as building fronts, interior walls, ceilings, and tabletops. Other duties may include:

- -Marks outline or pattern on glass and cuts glass using glass cutter;
- -Breaks off excess glass by hand or with notched tool;
- -Fastens glass panes into wood sash with glazier's point and spreads and smooths putty around the edge of the pane with knife to seal joints;
- -Installs mirrors or structural glass on building fronts, walls, ceilings, or tables using mastic screws or decorative moulding;
- -Bolts metal hinges, handles, locks, and other hardware to pre-fabricated glass doors;
- -Sets glass doors into frame and sets hinges.

Installation of metal entrances and fabrication of all metal storefront work is expected of glaziers. They should be capable of laying out and fabricating all phases of glass and metal work for each project, following blueprints and specifications.

JOB CLUSTER #4
"Construction"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$10.40/hour		

The hourly wage is based on union scale. Check with a local union on any change in scale and the apprenticeship program.

HOURS OF WORK

The normal workweek is forty hours. Most work is during daytime hours Monday through Friday. Some overtime is necessary during peak construction months and some emergency glass repair.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

- paid vacations
- paid holidays
- health insurance
- life insurance
- paid overtime
- sick leave

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

The local office of the employment service can provide information on the apprenticeship program.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Window Glasscutter's League of America
1078 South High Street
Columbus, Ohio 43206

Glass Industry
660 Madison Avenue
New York, New York 10021

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Glazier, metal furniture	865.684-018
Glass installer	865.684-014
Floor and wall applier, liquid	864.684-010

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: GRAPHIC DESIGNER

GRAPHIC DESIGNER designs art and copy layouts for material to be presented by visual communications media, such as books, magazines, newspapers, television and packaging. The majority of commercial artists work in the advertising industry.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Neat	Artistic	Good color vision
Artistic ability	Verbal	Eye-hand coordination
Dependable	Finger dexterity	Ability to sit for long periods
Original		Above average ability to see detail
Self-Discipline		
Creative		
Like to work alone		

YOU SHOULD KNOW THAT

Success in commercial art or illustration requires constant attention to new trends and techniques and the ability to adapt to new requirements.
People with physical handicaps which do not impair their ability to do art work may become commercial artists.
In addition to interest, aptitude, and talent in art work considerable formal training is usually required before the student becomes a qualified graphic designer.

YOU MUST BE ABLE TO

-create art forms which increase customer desire for your client's products or services.
-work under pressure to meet deadlines.
-create within guidelines and specifications from employers or clients.
-interpret written or oral instructions & translate requirements into the desired art forms.
-work while sitting at a drawing board for many hours at a time.
-perform precision hand work including the use of artists hand tools.

D.O.T 141.061-018

PREPARATION AND TRAINING:

The graphic designer must have a high school education or its equivalent. Specialized training beyond high school at an art school or college offering courses in the field of commercial art is almost always needed. You will receive valuable training while on the job.

RECOMMENDED HIGH SCHOOL SUBJECTS

English	History	Business Administration
Mathematics	Art	Current Events

ADDITIONAL FACTS ABOUT TRAINING

The commercial artist should learn about

-photo retouching.
-benday techniques.
-use of the air brush.
-type styles and lettering.
-ad layout and design.
-color separation.
-offset and letter press printing techniques.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities for commercial artists are limited in this state.
Jobs exist with newspapers, magazines, advertising agencies, and T.V. stations, or as a free lance artist.
Opportunities are best in large urban areas.

ADVANCEMENT

Advancement is based on the individual's artistic creativity, talent and education.

MORE ABOUT THE JOB:

Graphic Designers usually work in advertising agencies. They create drawings and illustrations for advertisements which may appear in newspapers and magazines; on packages, cans, wrappers, and billboards; and many other places. A Graphic Designer may work under the supervision of an art director and may be required to create original ideas or use someone else's. Artists may specialize in a specific part of the process of creating advertisements. For example, a designer works with the sponsor's ideas to make a rough layout of the art work. An illustrator makes sketches, drawings, cartoons, or animations, etc. A production artist assembles all parts of the advertisement for printing or processing.

Other duties of the graphic designer are:

- -meeting with clients or advertising people.
- -discussing particular advertisements and suggesting possible layout illustrations.
- -determining the best method and type of illustration or layout based on a customer's wishes, finances, and needs.
- -making rough layout of advertisement or poster and showing to client.
- -meeting with copywriter and printers giving them a dummy of the layout.
- -checking printed advertisement, making corrections, and giving approval.
- -presenting finished product to client.
- -preparing records of billing and giving to business departments or clients.

JOB CLUSTER #7
"Fine Arts and Humanities"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
35-40	$709-$1000/mo	$800/mo	$709/mo

Salaries may vary widely according to the variety and difficulty of the tasks performed.

HOURS OF WORK

The graphic designer usually works a forty-hour week, although overtime and weekend work may be required when finishing special projects or meeting a deadline. Free lance artists make their own hours (and their own paychecks).

FRINGE BENEFITS

Depending on place and length of employment, you may receive the following:

- overtime pay
- life insurance
- health and medical insurance
- paid holidays and vacations
- retirement plan

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

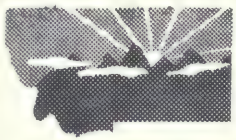
Society of Illustrators
128 East 63rd Street
New York, New York 10021

American Artists
24 West 40th Street
New York, New York 10018

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Cartoonist	141.061-010
Color expert	141.051-010
Illustrator	141.061-022
Art director	141.031-010

D O T Fourth Edition, page 81



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: GROCERY CHECKER

The GROCERY CHECKER works in food markets of all sizes computing the amount of a customer's purchase on a cash register and collecting payment. In many cases, the checker may also bag the groceries and help stock shelves.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Excellent memory	Clerical	Use of both hands and arms
Courteous	Numerical	Stamina for long periods of standing
Honest		Good eyesight (natural or corrected)
Tactful		No history of back trouble
Pleasing personality		

YOU SHOULD KNOW THAT

There may be noise and tension during peak work periods.
You may have to work Sundays and holidays and some evening shifts.
Some employers require bonding.
Most grocery checkers belong to the Retail Clerk's Union.

YOU MUST BE ABLE TO

Perform simple arithmetic operation with skill and speed;
Work under pressure without becoming flustered;
Get along with all types of people;
Maintain courtesy regardless of circumstances;
Stand for long periods of time in a confined area.

D.O.T 211.462-014

PREPARATION AND TRAINING:

You usually must be a high school graduate. In some cases, you may find part-time employment while still in school. Some college training in merchandising or business administration is helpful if you hope to move into management some day.

RECOMMENDED HIGH SCHOOL COURSES:

English	Business Machines
Business Math	Merchandising
Salesmanship	Speech

ADDITIONAL FACTS ABOUT TRAINING

Some large stores have their own training programs. In many cases, you may start as a bagger or stock clerk and work up.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities are plentiful and will continue to be good in coming years. Population growth and higher standards of living are creating greater demands on the retail food industry and a greater need for grocery checkers.

OPPORTUNITIES FOR ADVANCEMENT

In chain stores, you may go into top level administration jobs, through department head, assistant manager and manager. In all cases, you must show skill, maturity, and initiative to advance.

MORE ABOUT THE JOB:

The grocery checker usually:

lifts customer's purchases from the shopping cart;
records amounts on the computing register;
audibly calls the price on each item from memory or markings;
verifies specials from a price list;
weighs produce and other items to determine correct price;
notices any purchases which require deposits;
receives payment, makes change, issues trading stamps, refunds money;
receives credit coupons.

While the majority of the grocer checker's time is spent at the checkout counter, some time may also be spent on a variety of other tasks such as:

may be responsible for a specific department, such as dairy, delicatessen, produce, or meat;
may order, inventory, receive, and stock merchandise;
may be required to take daily produce price tests;
may assist in creating and building special displays;
might dust, sweep aisles, and keep stockroom in order.

JOB CLUSTER #13
"Personal Services"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$130-210/week	$170/week	$130/week

Salaries may vary throughout the state. Check with a local union or grocery market for accurate salary information for your area.

HOURS OF WORK

The forty-four workweek is normal. There may be evening, weekend, and holiday work without overtime pay. Shifts usually rotate.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

medical insurance
paid holidays
bonus plans
grocery discounts
overtime pay
paid vacation

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Employment Security Division
Box 1728
Helena, Montana 59601

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Food Store Workers
Science Research Associates Incorporated
Chicago, Illinois

United Business Schools Association
1518 K Street, N.W.
Washington, D.C. 20005

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Will-call clerk (ret. tr.)	299.467-010
Cashier	211.462-010
Cashier-wrapper	211.462-018

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
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THE JOB: GROUNDS KEEPER

The GROUNDS KEEPER cares for grounds, lawns, trees, shrubbery and gardens. They may be known by a number of titles; e.g., gardener, grounds keeper, or at times may be classified as a laborer.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Preference for outdoor work	Mechanical	Good health
Patient	Numerical	Normal strength and endurance
Persistent		Normal use of the back, arms and legs
Dependable		Normal color perception
Appreciate natural beauty		

YOU SHOULD KNOW THAT

Certain types of color blindness will make it difficult if not impossible to do the work of the grounds keeper.
Hazards connected with this job are cuts and bruises from improper equipment handling and the effects of some toxic insecticides.
Many grounds keepers work for the federal, state, county or local governments and enjoy excellent career stability and the opportunity to progress in civil service classification.

YOU MUST BE ABLE TO

-perform physical labor such as reaching, lifting, stooping and bending.
-work out of doors nearly all the working day in cold and wet weather at times.
-perform routine work on a day in, day out basis.

DOT 406.684-014

PREPARATION AND TRAINING:

There are no specific educational requirements for grounds keepers. All grounds keepers receive training on the job.

SUGGESTED COURSE OF STUDY

High School: A general course which includes English is recommended. Arithmetic and social studies are also recommended as good preparation for those who will take Civil Service tests for employment.

On the Job: The beginning grounds keeper will learn by observing and doing the many aspects of care and maintenance of the grounds and greenery with which he/she works.

Civil Service employers usually require applicants for grounds keeper to have some experience in gardening or groundswork in addition to passing a written civil service examination.

For those who hope to work for a public agency, a high school education is strongly recommended as preparation for the Civil Service test and promotions.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities exist in cities and towns of all sizes with all levels of government and with private employers such as shopping centers, industrial parts, hospitals, colleges and universities, and with private residential owners.

ADVANCEMENT

Grounds keepers may advance a number of ways, although advancements are not generally rapid.
In Civil Service, all grounds keepers receive regular pay raises. They can, after a time, take tests for advancement to gardener, gardener grounds keepers, or various supervisory positions as openings occur.
In private business, grounds keepers may advance to jobs with more responsibility and pay.
The grounds keeper may also enter business for himself/herself.

MORE ABOUT THE JOB:

The grounds keeper may perform one or several of a wide range of tasks which are required to care for and maintain grounds, trees, plants, gardens, shrubbery or other greenery including lawns.

Among the tasks the grounds keeper may be assigned are the following:

- mowing lawns
- irrigating lawns, trees and shrubs
- cultivating ground
- pruning and trimming plants
- preparing lawns for planting
- sweeping sidewalks and other areas
- edging lawns
- fertilizing lawns and other plants
- removing litter
- assisting in planting and transplanting

Grounds keepers will perform most of the above operations under the supervision of an experienced gardener or grounds supervisor.

Most grounds keepers will have to be able to operate such power equipment as power lawn mowers and trimmers and be able to make minor repairs on that equipment to keep it running smoothly. Most grounds keepers will also have to be able to drive a pickup or other small truck.

JOB CLUSTER #1
"Agribusiness & Natural Resources"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$653-1019/month	$700-800/mth.	$653/month

Salaries may vary depending on place or agency of employment.

HOURS OF WORK

The normal workweek is forty hours. Grounds keepers with public agencies usually work Monday through Friday. Self-employed grounds keepers will often work Saturdays, especially at private residences.

FRINGE BENEFITS

Depending upon place and length of employment, you may receive the following:

- paid vacations
- paid sick leave
- retirement plan
- health and welfare plans
- disability insurance
- regular pay raises (Civil Service)
- overtime pay

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Employment Security Division
Box 1728
Helena, Montana 59601

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

American Institute of Biological Sciences
3900 Wisconsin Avenue, N.W.
Washington, D.C. 20415

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Nursery laborer	405.687-014
Tree pruner	408.684-018
Tree surgeon helper	408.684-018
Grounds Guard, Arboretum	372.667-034

MONTANA VIEW

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THE JOB: GUARD, SECURITY

The GUARD protects property from damage or loss from fire, robbery, intruders, and other hazards. The guard helps keep order at large gatherings.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Emotionally stable	Clerical	Good general health
Alert	Numerical	Full use of hands, arms, and legs
Honest	Intelligent	Good hearing and eyesight
Dependable		
Able to deal with the public		

YOU SHOULD KNOW THAT

- -A clean police record is preferred; any offenses may affect your chances of being hired;
- -A good deal of the work is done at night;
- -Guards are subject to danger from intruders;
- -Prior military or police background may be helpful.

YOU MUST BE ABLE TO

- -Use various kinds of self defense techniques;
- -Work on your feet, standing or walking for up to twelve hours at a time;
- -Handle firearms properly;
- -Assess emergency situations quickly and take proper action when the need arises;
- -Fill out many forms accurately.

DOT 372.667-034

PREPARATION AND TRAINING:

Generally, high school graduation is enough formal training for becoming a guard. The ability to read and write reports is the most important educational preparation.

RECOMMENDED HIGH SCHOOL SUBJECTS:

High school courses are normally all the training necessary to become a guard. Courses to provide adequate communication skills are available. English will be a big help in making reports as well as typing, speech, and any police science courses available.

Dawson Community College offers a course in law enforcement, and this would aid in finding a job as a guard.

ADDITIONAL FACTS ABOUT TRAINING

Guards must be trained in the use of firearms and know how to protect themselves. Military service or police training schools both are excellent training areas. Any other necessary training is on the job.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Guards are employed in factories, office buildings, government or protective agencies, museums, and banks, to name only a few.

They are employed everywhere, but chances for jobs are best in large cities and in industrial areas.

Mechanical devices such as electrical controls for detection of intruders, automatic gates, and advanced ceiling methods have eliminated some jobs.

Shortages of guards occur during peak industrial periods; conventions, trade shows, and other events require additional guards for a short time.

ADVANCEMENT

Opportunities are limited for the guard.

In the larger institutions, advancement may be to a supervisory position.

MORE ABOUT THE JOB:

The guard's job consists mostly of a series of routine tasks which vary from job to job. The guard performs these tasks on a day to day basis.

Some duties include:

- -Patrolling grounds and buildings;
- -Punching clocks;
- -Checking doors, windows, and lights;
- -Knowing locations of fire exits, sprinkler systems, and fire extinguishers;
- -Preparing reports.

The guard must always be alert for trouble and take quick action when it occurs. Trouble may take the form of an unruly person who must be talked into leaving an establishment or must be escorted out. On the other hand, an emergency situation may arise which calls on the guard to decide the priority of things to be done such as whether to call the police or fire department, or to evacuate people first.

At public gatherings, guards keep order and give information and directions.

Some guards are assigned to strategic locations in buildings to watch for suspected shoplifters and thieves or to keep unauthorized people out of particular areas.

The guard also accompanies messengers or others who are carrying valuables of various kinds.

JOB CLUSTER #13
"Public Services"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	40	$677-$936/mo		$677/mo

Salaries may vary between industry or government positions and in different areas. You may wish to check a local source for accurate salary information.

HOURS OF WORK
The forty-hour workweek is standard. Most of the guard's work is performed at night. Overtime occurs during industrial rush periods. Saturday, Sunday, and holiday work is often required as protection of establishments is a full-time job.

FRINGE BENEFITS
Depending upon length and place of employment, you may receive:

health insurance	paid vacation
life insurance	paid holidays
retirement plan	sick leave

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office.

Employment Security Division
Box 1728
Helena, Montana 59601

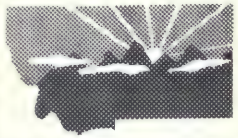
ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

International Association of Chiefs of Police
1319 18th Street, N.W.
Washington, D.C. 20036

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Armored car guard	372.567-010
Bodyguard	372.667-014
Correction officer (gov. ser.)	372.667-018
Security inspector (gov. ser.)	372.363-010
Merchant patroller	372.667-038



MONTANA VIEW

Vital Information for Education and Work
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Georgia Rice, Superintendent
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THE JOB: HARDWARE SALESPERSON

A HARDWARE SALESPERSON displays and sells such items as paint, building supplies, electrical equipment, gardening tools, household goods, plumbing supplies, and woodworking tools.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Good grooming	Verbal	Average health
Persuasive	Numerical	Physical stamina
Courteous	Clerical	Good hearing
Pleasant personality		Good eyesight

YOU SHOULD KNOW THAT

-The biggest asset for a salesperson of hardware is an interest in and a broad knowledge of hardware products, their uses, characteristics, and quality.

YOU MUST BE ABLE TO

-Communicate your ideas clearly and effectively;
-Deal with all types of people and create a good impression;
-Stand for long periods of time while dealing with customers;
-Work with numbers, words, and people;
-Do general clerical work such as writing and filing reports.

DOT 279.357-050

PREPARATION AND TRAINING:

There are no formal educational requirements for hardware sales. Most employers prefer high school graduation. You should understand, though, that those who finish their education will be given preference over those who have not. Some college or business college training in sales will be helpful.

RECOMMENDED HIGH SCHOOL SUBJECTS:

High schools can give a basic background in all subjects which will help you in becoming an effective salesperson. Special attention should be given to English and Speech. Other important classes should include:

Math	Sales	Typing
Retailing	Home Decoration	Drafting
Electricity	Metal Shop	Physics

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

The skilled and experienced workers will not have any trouble in finding employment.

The trainee may find it somewhat difficult to start.

OPPORTUNITIES FOR ADVANCEMENT

Promotion may be to manager of a department or to manager of a branch store.

Some salespersons may open their own shop or buy a franchise for a hardware store.

MORE ABOUT THE JOB:

Hardware salespeople assist customers--who may range from hobby enthusiasts to professional craft workers in selecting merchandise for their particular needs.

They must be familiar with a wide range of products and materials and demonstrate and explain their proper use.

They use a knowledge of the crafts related to building in order to help solve a variety of problems.

They may measure and cut glass, wire, and screening with appropriate hand tools.

They may estimate the amount of paint needed to cover the surfaces and mix paints to produce desired shades using a paint mixing machine and color charts. They may assist in the development of color schemes.

The hardware salesperson performs the usual functions of a retail salesperson in completing sales, taking cash, or arranging for future payment and delivery. He/she may assemble and set up equipment for displays.

Stocking shelves and taking inventories are sometimes part of his/her duties.

JOB CLUSTER #12
"Marketing and Distribution"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$130-$185/wk	$145-$155/wk	$130/wk

Many stores work on a salary plus commission basis. A local source should be checked for accurate salary information.

HOURS OF WORK

The workweek is generally forty hours including some Saturday work. Customary hours are from 9 a.m. to 6 p.m. but work until 9 p.m. one or two nights a week is common.

FRINGE BENEFITS

Depending upon length and place of employment, you may receive:

- retirement program
- paid vacation
- paid holiday
- paid overtime
- merchandise discount
- sick leave

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
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Employment Security Division
Box 1728
Helena, Montana 59601

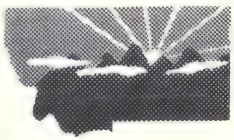
ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

The National Retail Merchants Association
100 W. 31st Street
New York, N.Y. 10001

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Salesperson, Parts	279.357-062
Salesperson, Wall Coverings	279.357-050
Salesperson, Floor Coverings	270.357-026



MONTANA VIEW

Vital Information for Education and Work
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Helena, Montana 59601

THE JOB:

HEAVY EQUIPMENT OPERATOR
(D.O.T. - OPERATING ENGINEER)

HEAVY EQUIPMENT OPERATORS run several types of construction equipment to excavate and grade earth, erect structural and reinforcing steel, mix and place concrete. These machines include power shovels, cranes, derricks, hoists, pile drivers, concrete mixers, paving machines, trench excavators, and bulldozers.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Efficient	Mechanical	Good health
"Iron Nerves"	Spatial	Agile
Mentally alert		Good vision
Pride in work		Full use of limbs
		Physical stamina

YOU SHOULD KNOW THAT

- -You may be required to join a union;
- -You must have good eye-hand-foot coordination;
- -Accuracy must be achieved in this work which requires constant attention;
- -You must prefer working with machinery, tools, and your hands;
- -You must be able to drive heavy equipment and make minor repairs;
- -You must be able to work with other people as a teammate.

YOU MUST BE ABLE TO

- -Tolerate noise, dust, and all types of weather conditions including cold, rain, and heat;
- -Work long hours, sitting or standing;
- -Work in situations which involve activities of a routine, concrete, and organized nature;
- -Understand and carry out oral, written, and scheduled instructions.

D.O.T. 859.683-010

PREPARATION AND TRAINING:

High school or its equivalent is required by most employers. Some college or technical training is always preferred.

RECOMMENDED HIGH SCHOOL SUBJECTS:

High schools cannot provide all the necessary background for potential heavy equipment operators, but they can give a basic background for the training to follow. Essential courses will be auto mechanics, metal shop, and drafting. Math, physics, English, and speech should also be taken.

The Missoula Technical School offers a course in heavy equipment operation.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Most workers are employed on construction work such as dams, highways, and airports.

Others are employed by utility companies, manufacturers, and other business firms, as well as state and public works departments.

Relatively few operators are self-employed.

Job opportunities will exist because of the need to maintain and repair the nation's expanding highway systems.

ADVANCEMENT

Advancement opportunities are limited.

MORE ABOUT THE JOB:

Heavy equipment operators operate such machinery as cranes, rollers, compressors, tractors, pile drivers, spreaders, trenchers, back hoes, power shovels, bulldozers, hoists, concrete mixers, paving machines, and other machinery that can lift, push, pull, pound and grade.

Depending on the machine, operators may turn valves to control air and water output of compressors and pumps, or adjust hand wheels and press pedals to drive machines and control attachments such as blades, buckets, scrapers and swing booms.

The operator must know how to make minor emergency adjustments and repairs of his/her machinery.

They are sometimes required to keep reports or simple records of fuel consumption and equipment performance and production.

Some heavy equipment is very complex to operate. An example of this is the crane. The operator must consider the weight of the material he/she is lifting as it will vary according to its composition and moisture and level and angle of the boom. The operator must acquire a feeling for the equipment he/she is operating.

Montana state law requires hoisting operators to hold a joisting license.

JOB CLUSTER #4
"Construction"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$11.72/hr, with time and one-half on Saturday. Double time on Sundays and holidays.		

This is journeymen's salary information. Check with your local unions for information on apprentice programs and salaries.

HOURS OF WORK

The normal workweek consists of five eight-hour days, Monday through Friday, with work beginning at 8:00 a.m. Overtime is usually paid at the rate mentioned above. Much construction work is stopped by bad weather. The high wage scale is based on the possibility of intermittent employment.

FRINGE BENEFITS

You will receive: retirement program, paid vacations, paid overtime, health insurance.

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
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Employment Security Division
Box 1728
Helena, Montana 59601

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Associated General Contractors of America, Inc.
1957 E. Street, N.W.
Washington, D.C. 20006

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Road-Mixer Operator (const.)	859.683-026
Railway Equipment Operator	859.683-018
Road Roller Operator	859.683-030

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: HELICOPTER PILOT

The HELICOPTER PILOT operates helicopters and other rotary wing aircraft commercially in any one of the following areas: passenger commuter service, aerial application, aerial photography, charter flights, construction, land surveying or industrial work.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Mature	Mechanical	Good physical health
Dependable	Numerical	Good vision & hearing
Mentally alert	Spatial	Full use of hands and feet
Calm	Finger dexterity	Eye-hand coordination
Able to make quick decisions		Ability to sit for long periods

YOU SHOULD KNOW THAT

- -Physical requirements for this job are specific and exacting;
- -Military flight training and experience are especially valuable;
- -You must have good color vision;
- -Any physical handicaps that could prevent or delay quick reactions will rule you out;
- -When you carry passengers, you are responsible for the lives of those aboard.

YOU MUST BE ABLE TO

- -Make quick decisions, often under pressure;
- -Work in a small confined space for long periods, usually sitting down;
- -Qualify for a commercial pilot's license for rotary wing aircraft with helicopter rating;
- -Command the respect of your co-workers and passengers.

DOT 196.263-038

PREPARATION AND TRAINING:

Applicants are expected to have at least a high school diploma with a good grade point average. Completion of some college program is also expected with a strong record in the math and sciences. Training is available in some flight training schools, both private and commercial. Military flight training and experience are extremely valuable.

RECOMMENDED HIGH SCHOOL SUBJECTS:

An adequate sound background should be obtained in high school in physics, physical science and chemistry. Typing, English, and speech prepare a prospective pilot to make reports and communicate effectively with his co-workers. General math, algebra and geometry should also be included.

COURSE OF STUDY AFTER HIGH SCHOOL:

College training should include math and science as well as aviation-oriented courses.

ADDITIONAL FACTS ABOUT TRAINING:

You must be licensed by the FAA for rotary wing aircraft operation with a helicopter rating. A private pilot's license is the first step in flight training. There also will be ground training. Then comes a commercial rating and instrument rating, both of which involve ground and in-flight training.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities are greatest in large urban areas.

A possible exception is in helicopter aerial application, an area which is concentrated mostly in agricultural areas.

ADVANCEMENT

The passenger helicopter pilot can advance to: check pilot
chief pilot
instructor
flight manager.

MORE ABOUT THE JOB:

The helicopter pilot:

-Must hold a commercial airplane pilot's license with a special helicopter rating;
-Is licensed by the Federal Aviation Administration;
-Must be in excellent health and pass a rigid physical examination;
-In passenger flights, is responsible for the lives of those aboard his craft;
-Demands a high degree of precision flying.

Duties may include:

-Reviewing ships' papers to determine load weight, fuel supply, weather conditions, passenger count, flight route, and schedule;
-Orders any necessary changes in the above factors to insure maximum safety;
-Reads gauges to verify that oil pressure, fuel levels, hydraulic pressures, engines and landing gear are at prescribed levels prior to starting;
-If in industrial work, checks hoists, cables and releases and supervises attachment of cables to objects to be moved, usually heavy machinery and steel beams;
-Obtains clearance from control tower or persons in charge and lifts off;
-Follows tower instructions or predetermined schedule of plans;
-Logs information such as flight time, altitude flown, fuel consumed, weather conditions, and chemicals used.

JOB CLUSTER #15
"Transportation"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	40*	$20,000 - $24,000 annually		

*Actual flight time may total between twenty and thirty hours a week if employed by a commercial firm.

Specific information on salaries may be obtained at your nearby employment office.

HOURS OF WORK

Helicopter pilots, depending on the type of service performed and the employer, may work anywhere from 30 to 40 hours a week. For passenger flying, the government regulates flight time to 100 hours a month. For other types of jobs, however, such as aerial application, aerial photography, or industrial work, flight time may be higher. Weekend work is quite common.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

retirement plan	sick leave	life insurance
disability protection	expense account	paid holidays
health plan	paid vacation	

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Helicopter fixed base operators.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Airline Pilots Association, International
1329 E. Street, N.W.
Washington, D.C. 20004

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Airplane Pilot	196.263-010
Navigator	196.167-014
Test Pilot	196.263-042

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: HIGHWAY PATROL OFFICER, STATE

HIGHWAY PATROL OFFICERS are protective service officers whose primary responsibility is to enforce the laws and regulations governing the use of state highways.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Emotionally stable	Clerical	Good general health
Good judgement	Good memory	Normal hearing
Courageous	Numerical	Not less than 5'9" nor more than 6'6" tall
Tactful		Normal color vision
Skill in dealing with people		Good eye-hand coordination
		Not overweight

YOU SHOULD KNOW THAT

-You must possess a valid Montana Driver's License at the time of employment;
-Patrol Officer positions are filled by competitive examinations;
-You must undergo a medical examination.

YOU MUST BE ABLE TO

-Pass a physical agility test to be eligible;
-Work in all kinds of weather conditions at all hours of the day or night;
-Operate a motor vehicle at high speeds and in other hazardous conditions;
-Work anywhere in the State of Montana.

DOT 375.263-018

PREPARATION AND TRAINING:

MINIMUM SCHOOLING:

You must have at least a high school diploma to be a highway patrol officer. College training in police science is strongly recommended. Dawson Community College does offer one course in law enforcement.

RECOMMENDED HIGH SCHOOL COURSES:

English	General Science	Math	Algebra
Speech	Social Science	Biology	Chemistry
Typing	Physical Education		

ADDITIONAL FACTS ABOUT TRAINING:

Much of your training in specific job duties will come during the highway patrol academy course which you will be required to take after being hired. This includes classroom studies, marksmanship, and driver training. The highway patrol does not provide samples of its entrance tests, nor does it recommend any specific college training program. Many highway patrol officers are police officers for a year or more before transferring to the patrol.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Job opportunities in the State of Montana are fair for the fully qualified applicant.

The number of applicants often exceeds the number of job openings since many individuals cannot meet the requirements.

The increasing number of automobiles and construction of more multiple lane highways will create additional job openings.

OPPORTUNITIES FOR ADVANCEMENT

Advancement is usually by promotion to the next higher grade in rank, although some officers may become commissioners or directors.

MORE ABOUT THE JOB:

The highway patrol officer patrols the highways to enforce laws and regulations. They also are involved with preventive safety activities and emergency and first aid activities.

SPECIFIC DUTIES INCLUDE:

-Apprehension of violators;
-Searching for stolen and unwanted vehicles;
-Appearing in court;
-Checking overloaded trucks;
-Inspecting transported materials;
-Rendering first aid;
-Keeping traffic moving;
-Investigating accidents;
-Filing reports;
-Aiding stranded motorists;
-Locating lost persons.

Some highway patrol officers are assigned specialized work such as:

-Fingerprint classification;
-Chemical analysis;
-Trainee instructor;
-Piloting police aircraft.

JOB CLUSTER #14
"Public Services"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	40	$15,000-$21,000/yr	$19,000/yr	$15,000/yr

Salaries are influenced by classification and length of employment.

HOURS OF WORK

Forty hours is the normal workweek.

FRINGE BENEFITS

Depending upon the length and place of employment, you may receive:

- paid vacation
- sick leave
- group life insurance
- group health insurance
- worker's compensation
- participation in the state employees' retirement system

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LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Montana Highway Patrol
Personnel Department
1014 National Avenue
Helena, Montana 59601

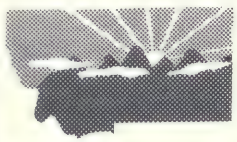
ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

International Association of Chiefs of Police
11 Firstfield Road
Gaithersburg, Md. 20760

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Detective	375.267-010
Game Warden	379.167-010
Guard, Security	372.667-034
Fire Fighter	373.364-010
Insurance Investigator	241.217-010



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB:

HOD CARRIER
(D.O.T. CONSTRUCTION WORKER II)

HOD CARRIERS serve journeymen workers in their respective trades by supplying them with materials and setting up and moving the scaffolding upon which these journeymen work. When necessary, the HOD CARRIER climbs ladders and walks along scaffolding to bring material to the worker.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Dependable	Finger dexterity	Good general physical health
Good judgement	Average manual dexterity	Above average strength and endurance
Able to follow instructions	Good eye-hand coordination	Able to stoop, kneel, crouch and/or crawl while working
Prefer physical work		
Prefer working outdoors		

YOU SHOULD KNOW THAT

- -Sharp changes in wages may occur due to the seasonal nature of construction work and other factors;
- -Small possibilities of advancement are open for hod carriers;
- -Many hod carriers belong to the International Hod Carriers, Building and Common Laborers Union of America;
- -Construction work is dangerous work.

YOU MUST BE ABLE TO

- -Be on your feet throughout the workday;
- -Work from ladder and scaffolding;
- -Tolerate different kinds of weather;
- -Perform hard, tiring work throughout the day;
- -Work from ten to twelve hours when called upon to do so.

D.O.T. 869.687-026

PREPARATION AND TRAINING:

Many hod carriers, especially in small communities, acquire their skills informally by working as helpers with contractors and experienced bricklayers or stone masons.

No formal training is necessary to become a construction laborer or a hod carrier.

High school graduates do, however, have a better opportunity for eventually becoming apprentices and skilled craftworkers than do other laborers.

An employer will be influenced by an applicant's record of reliability, honesty, and industry. These factors are also taken into consideration when it is decided who will receive training in more complex work and who will be promoted.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Hod carriers work on all kinds of construction jobs such as bridges, fire ducts, and piers, office and apartment buildings, highways and streets, pipelines, railroads, rivers, and harbor projects, sewer, tunnels, and waterworks.

They are engaged in remodeling and repair work.

Of the more than 800,000 construction laborers and hod carriers, most are located in highly populated and industrialized sections of the country.

OPPORTUNITIES FOR ADVANCEMENT

There is little advancement opportunity in this field of work.

Some hod carriers do become gang supervisors.

A small number get into an apprenticeship program.

MORE ABOUT THE JOB:

Hod carriers:

-Supply bricklayer, plasterer, or stone mason with bricks, concrete, mortar, or plaster using hod;
-Climb ladders and walks along scaffold when necessary to reach workers;
-Clean excess mortar from finished work using brush or scraping tools;
-May mix mortar or concrete by hand or by use of mixing machine;
-May assist in erecting scaffold.

JOB CLUSTER #4
"Construction"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	40	$10.15/hr		

Salaries may vary throughout the state. You may wish to check a local union or other source for information for a specific area.

HOURS OF WORK

The usual workweek is forty hours. There are times when these workers go beyond a forty-hour workweek and receive extra hourly pay.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

paid vacations
welfare plan
worker's compensation
paid holidays

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

The personnel manager of a construction company can provide you with further information.

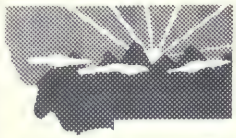
ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Laborers' International Union of North America
905 16th Street, N.W.
Washington, D.C. 20006

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Awning-Hanger Helper	869.687-010
Form-Setter Helper (const.)	869.687-026
Surveyor Helper	869.567-010



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: HOSPITAL ADMITTING CLERK

The ADMITTING CLERK interviews patients or relatives to obtain information required for hospital admissions. The CLERK may also collect initial payments and refer the patient to the credit office. She/he provides a sympathetic, courteous service to assist patients in adjusting to the hospital or institution.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Tactful and Courteous	Verbal	Normal vision and hearing (natural or corrected)
Sympathetic and Understanding	Clerical	Good physical health
Stable	Keep confidential information	Distinct, pleasant voice
Accurate		
Neat		

YOU SHOULD KNOW THAT

-This job requires a person who is able to assume responsbility;
-Speaking ability, appearance and tactfulness are important for this job.

YOU MUST BE ABLE TO

-Get along with people, and inspire the trust and confidence of patients;
-Work irregular hours;
-Follow set procedures and methods of doing a job;
-Deal with questions with ease.

DOT 205.362-018

PREPARATION AND TRAINING:

Admitting Clerks:

-Must be high school graduates;
-Should have at least two years of education beyond high school;
-Should obtain training in liberal arts and business through college or adult education programs.

COURSE OF STUDY:

Psychology	Office procedure	Interview techniques
Sociology	Typing	Office machines
Medical terminology	English	

ADDITIONAL FACTS ABOUT TRAINING

On-the-job training is the best source of training at this time. Check with your counselor for local junior colleges offering clerical training.

Private training will probably be much more expensive than public training.

PROSPECTS AND OPPORTUNITIES:

JOB AVAILABLILITY TRENDS

Admitting clerks work in all hospitals and health related institutions.

There is a need for qualified workers in this field.

ADVANCEMENT

The qualified worker usually receives scheduled pay raises.

Some workers advance to higher paying secretarial positions within the institutions.

Admitting clerks may with additional training or experience, secure a position as Admitting Officer or Cashier.

MORE ABOUT THE JOB:

The Admitting Clerk assists in the reception of incoming patients for hospitalization or convalescent care. He/she is responsible for sympathetic, courteous service to assist patients in their adjustment to the hospital. The Admitting Clerk may also perform related duties such as those of a receptionist or insurance clerk. In hospitals:

-Receives patients and escorts them to wards after admission;
-Interviews patients or relatives to secure data required for admission;
-Collects initial payment or directs patient to credit office;
-May store patient's valuables and gives receipt;
-Performs clerical work and other duties as required;
-Takes and confirms reservations for incoming patients;
-Arranges transfer of patients from one accommodation to another;
-Answers questions about the hospital and its services;
-Prepares pre-admission forms, dismissal forms, and other records;
-Operates addressograph, typewriter, and related office equipment.

JOB CLUSTER #2
"Business and Office"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$140-$180/wk	$150/wk	$140/wk

HOURS OF WORK

Normally, a forty-hour week. The admitting clerk may have to work holidays and weekends, getting weekdays off. You may work a night shift and overtime during emergencies.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

health insurance
retirement plan
paid vacations and holidays

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Contact the personnel director of your local hospital.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Appointment Clerk	237.367-010
Information Clerk	237.367-018
Receptionist	237.367-038
Registration Clerk	205.367-042

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: HOSPITAL CASHIER

A HOSPITAL CASHIER receives money (or legal tender) from patients or responsible party in payment for services and keeps records of all transactions. In many instances, other duties are also required of the cashier.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Accurate	Clerical	Good vision & hearing (natural or corrected)
Tactful	Numerical	Average finger dexterity
Honest	Able to work without close supervision	Able to reach, bend and stoop
Agreeable		

YOU SHOULD KNOW THAT

-you must be bondable;
-you will be expected to furnish references and good recommendations from past employers.

YOU MUST BE ABLE TO

-work accurately through frequent interruptions;
-follow standard instructions without constant supervision;
-sit at a desk and walk short distances;
-stand for long periods of time;
-handle money carefully and accurately;
-use office equipment and keep required records.

D.O.T. 211.362-010

PREPARATION AND TRAINING:

Some cashiers' jobs have no specific educational requirements and may be filled by anyone with a knack for figures and the alertness to make change accurately for long periods of time. These jobs with minimum requirements also provide minimum pay.

Responsible cashiers working for large firms or agencies must have been graduated from high school and are usually expected to have completed some post high school business training.

RECOMMENDED HIGH SCHOOL SUBJECTS: Business Arithmetic, Bookkeeping, Typing, Business Law, Business English, Office Machines

ADDITIONAL FACTS ABOUT TRAINING

The amount of training required usually depends upon the complexity of the cashier's job.

SPECIAL ENTRY REQUIREMENTS

In addition to aptness with figures, the basic requirement for a cashier working at any skill level is honesty and integrity. Once an individual is tagged with any evidence of (or even suspicion of) dishonesty, work as a cashier becomes impossible to obtain.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

There are many cashiers employed in the state.
Opportunities are found in many fields - amusement, sales, service industries, transportation.
At a retail store or restaurant cashier level, the job is highly competitive.

ADVANCEMENT

Opportunities for advancement are very limited in theaters and restaurants.
In agencies employing numbers of cashiers such as public utilities, the cashier may qualify for promotion to supervising cashier.
In certain types of businesses, a cashier may become controller.
Banks may hire experienced cashiers as tellers.

MORE ABOUT THE JOB:

A cashier handles money paid by customers or patrons for goods and services. Nearly all cashiers have other duties related to their responsibility for receiving money. These other duties depend on the field in which the cashier works. Other job duties may include the following:

box office cashier	grocery checker	bill clerk
ticket seller	bill teller	

The specific duties may include:

-posting and totalling receipts;
-preparing bank deposits;
-paying out cash or writing company checks to cover disbursements for supplies and equipment;
-balancing cash against receipts;
-preparing daily cash receipts and disbursement reports;
-preparing pay envelopes or paychecks;
-preparing tax reports.

A cashier in a restaurant may be responsible for handling reservations, typing menus or for a sales counter, handling candies and cigarettes.

A grocery checker may wrap and bag purchases, help re-stock shelves and price mark items on the shelves.

A hotel cashier may also operate a check room and may keep records of telephone calls, valet service and room service.

JOB CLUSTER #2
"Business and Office"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$150-200/wk	$160/wk	$150/wk

Salaries may vary throughout the state. Check a local source for accurate salary information for your area.

HOURS OF WORK

In utilities and banks, usually eight hours a day Monday through Friday is normal. In theaters, restaurants and some retail stores, hours until 9:00 p.m. or later and work on weekends and holidays is usual.

FRINGE BENEFITS

Depending on place and length of employment, you may receive the following:

health insurance	retirement plans	paid vacations and holidays

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LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Any business that hires cashiers can give you further information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

United Business Schools Association
1518 K Street, N.W.
Washington, D.C. 20202

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Sales clerk	290.477-014
Driver's cash clerk (motor trans.)	211.462-030
Change booth cashier	211.462-010
Teller (light, heat and power)	211.462-034

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MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: HOTEL CLERK

HOTEL AND MOTEL CLERKS deal with customers in person, by telephone, and by letter to secure reservations for rooms and other hotel facilities.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Poise	Numerical	Normal health
Neat appearance	Clerical	Good vision and hearing (natural or corrected)
Attention to detail	Able to follow specific instructions but work without close supervision	Average eye-hand coordination
Honest		Normal use of hands and fingers
Like people		
Courteous		

YOU SHOULD KNOW THAT

- -Working conditions are usually pleasant in well lighted and air conditioned buildings;
- -Hotel clerking occupations are generally quite free of hazards;
- -There are chances in the field of motel management for you to be promoted quite rapidly if you show ability, honesty and eagerness to learn the job.

YOU MUST BE ABLE TO

- -Create good will for the hotel or motel by being courteous, friendly and helpful to guests;
- -Perform a variety of routine clerical tasks accurately and swiftly;
- -Stand for long periods of time at the counter;
- -Be available for night and weekend work and often work on holidays.

DOT 238.362-010

PREPARATION AND TRAINING:

Hotel and motel front office clerks should have a high school education as the minimum. You can increase employment opportunities greatly by completing some postsecondary training.

COURSE OF STUDY INCLUDES

High School: A business course which includes bookkeeping, typing, and business arithmetic is good preparation. Also valuable are speech and other courses which improve public contact ability.

Postsecondary: Business management as well as hotel and/or restaurant management courses are excellent preparation.

Experience as a restaurant worker or a bellhop in a hotel or motel will be valuable when applying for a job as a front office clerk in a hotel or motel. Part-time work as a bellhop at night combined with school during the day often provides the education and experience necessary to find employment as a front office clerk.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities exist throughout the state.

High turnover due to low income creates many openings.

ADVANCEMENT

Advancement is best for those who are employed by large chain hotels and motels.

Often, advancement requires the clerk to serve in several jobs at approximately the same level of responsibility so that the entire operation is learned.

After learning the many phases of hotel work, the clerk may be promoted to chief room clerk, assistant manager, and hotel or motel manager.

MORE ABOUT THE JOB:

Front office clerks in hotels and motels perform a variety of duties. In larger establishments, the clerk will spend more time on a few tasks while clerks in smaller hotels and motels are likely to do more things each day.

Front office clerks' typical tasks:

Room or Desk Clerk - checks guests in and out of the hotel or motel;
- advises guests of services available and coordinates activities of bellhop.

Key Clerk - issues and receives keys to rooms.

Information Clerk - answers all kinds of questions about the city and area.

Mail Clerk - distributes mail to guests.

Reservations Clerk - takes and confirms reservations by telephone, mail and in person.

Most clerks, in addition to their own duties, are required to perform other clerical tasks.

JOB CLUSTER #2
"Business and Office"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$3.10-$4.00/hr	$3.45-$3.75/hr	$3.10/hr

Wages, particularly in small hotels, may include some meals and/or lodging.

HOURS OF WORK

The normal workweek is forty hours. Night shifts, weekend, and holiday work are quite common. In many hotels, you may work nights for a period of time and then be switched to a day shift for a while.

FRINGE BENEFITS

Depending upon length and place of employment, you may receive:

- paid vacation
- free meal per shift
- group insurance
- uniforms provided
- free lodging
- Social Security coverage
- health and welfare plans

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

The local office of the employment service can provide further information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

American Hotel and Motel Association
221 West 57th Street
New York, NY 10019

Council on Hotel, Restaurant and Institutional Education
Statler Hotel
Cornell University
New York, NY 14850

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Lost and found clerk	222.367-034
Admitting officer (med. ser.)	205.137-010
Information clerk	237.367-018
Receptionist	237.367-038

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Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: HOTEL-MOTEL MANAGER

The HOTEL-MOTEL MANAGER supervises overall operations of their establishment to insure the comfort of guests. They oversee the staff, make sure personnel work efficiently, manage promotional plans, and approve purchase of equipment and supplies. They also set policies on personnel practices, credit, and room and service rates.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Patient	Verbal	Average strength
Alert	Numerical	Average physical health
Tactful	Clerical	Good grooming
Enthusiastic	Analytical	Normal vision and hearing (normal or corrected)
Even tempered		

YOU SHOULD KNOW THAT

- -The motel-hotel manager must have self-confidence and enthusiasm in every project;
- -The motel-hotel manager should be honest;
- -The person who wants to be a motel manager must first of all enjoy meeting people;
- -The motel-hotel manager works indoors in clean comfortable surroundings.

YOU MUST BE ABLE TO

- -Be even-tempered and pleasant with employees and guests of motel and should be willing to pitch in to help with various kinds of work around the motel when necessary;
- -Deal with people patiently and courteously in accordance with the old rule of "the customer is always right."

DOT 187.117-038

PREPARATION AND TRAINING:

Although it is possible to become a motel manager simply by taking a minor job and working up to the more important one, the way will be easier and quicker if the student has more than a high school education. There are few colleges which offer curriculums in hotel management. Home study courses offered by the American Hotel Institute would be helpful and can generally be taken at the same time the student works at a minor job in a hotel or motel.

RECOMMENDED HIGH SCHOOL SUBJECTS:

English	Bookkeeping
Social Science	Typing
Speech	

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Growth of the motel-hotel business is anticipated due to the growing population and rising income level which leads to increased travel.

Opportunities for motel-hotel managers in Montana are not abundant.

OPPORTUNITIES FOR ADVANCEMENT

Hotel chains may offer better opportunities for advancement than independent hotels since vacancies can arise in any hotel of the chain as well as on the central management staff.

MORE ABOUT THE JOB:

The hotel-motel manager directs and coordinates the activities of the various departments of the motel.

The hotel-motel manager may:

-Formulate policy on such matters as credit, personnel, rates, departmental jurisdiction, publicity, and the type of trade desired which might mean that the motel caters particularly to traveling people;
-The manager must direct the clerical employees, do the hiring and discharging necessary;
-May take on a number of duties such as keeping the books and making up the payroll, and may spend a great deal of time behind the front desk attending to the renting of rooms;
-Must direct the cleaning operations and probably make minor repairs to the buildings themselves reporting major repairs needed to the owner or arrange to have these done;
-Must keep records of the rentals collected and funds spent or supervise these operations being done by an employee;
-Must provide an answering service, mail delivery, and travel, recreation, and scenic attractions information;
-If there is a restaurant or coffee shop in connection with the hotel or motel, may be responsible for it.

JOB CLUSTER #12
"Personal Services"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$9,000-$25,000	$14,000-$20,000	$9,000-$12,000

Salaries may vary throughout the state and depend on the size of the establishment. You may wish to check a local source for salary information for your area.

HOURS OF WORK

It would be a rare week if the motel-hotel manager would work only forty hours. The smaller hotels or motels mean longer working hours.

FRINGE BENEFITS
Depending on length and place of employment, you may receive:

housing
laundering service
meals
group life insurance
accident insurance

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LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

American Hotel Association
221 West 57th Street
New York, New York 10022

Hotel Sales Management Assn. (International)
362 Fifth Avenue, Suite 1100
New York, New York 10001

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Property Manager	186.117-042
Real Estate Agent	186.117-058
Recreation Supervisor (spec. activity)	187.137-010
Leasing Agent	250.357-014

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: HOUSEKEEPING AIDE

The HOUSEKEEPING AIDE is responsible for the cleaning and serving of defined hospital areas such as wards, office, or surgery. As part of the housekeeping staff, they are usually supervised by the executive housekeeper or a professional nurse.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Neat appearance	Motor coordination	Normal vision
Cooperation	Finger dexterity	Good physical health
Concern for detail and cleanliness	Manual dexterity	Able to stand, walk, kneel, crouch and climb stairs
more than average courtesy	Numerical	

YOU SHOULD KNOW THAT

-you will not qualify for hospital employment if you have a police record for a criminal offense or if you have an active communicable disease.

YOU MUST BE ABLE TO

-work under close supervision.
-work willingly on routine tasks.
-work carefully with consideration for persons who are ill.
-work with materials and in places which may be distasteful (strong odors)
-work for long periods while on your feet.

D.O.T 323.687-010

PREPARATION AND TRAINING:

The job of housekeeping aide is an entry job and has no formal educational requirement. However, a high school graduate stands a better chance of getting a job and of advancing to better jobs as they open up.

RECOMMENDED HIGH SCHOOL SUBJECTS:

Homemaking	Sewing
Family Relations	Health
Cooking	

ADDITIONAL FACTS ABOUT TRAINING:

A clean neat appearance and pleasant personality are desirable for all hospital jobs. Housekeeping aides are trained on-the-job by experienced personnel. They may become a Certified Executive Housekeeper with a minimum of 8 weeks of formal training at a school of higher learning that offers a course recognized by the National Executive Housekeeper Association.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Although there is not a heavy demand for these workers, job opportunities are usually good.

Opportunities are found in every hospital or convalescent home. They are greatest in population areas. The projected opportunities in Montana indicate that for the years 1980-1990 the expansion will be good.

ADVANCEMENT

There is no formal line for advancement and opportunities are limited unless the individual learns additional skills on-the-job or through additional training. A person can become a Certified Executive Housekeeper by attending an 8 week course of formal education (Weber State of Ogden, Utah) and working in a sub or supervisory position for one year.

MORE ABOUT THE JOB:

The housekeeping aide may work on a variety of tasks all aimed at keeping clean the assigned area.

In hospitals and convalescent homes, housekeeping aides may:
- -clean wards, rooms, baths, laboratories, offices
- -sweep, mop, wax floors
- -dust and clean furniture and equipment
- -clean window sills
- -empty trash baskets
- -scrub and polish bathrooms
- -clean and tidy utility rooms
- -polish brass
- -clean and polish glass panels
- -arrange furniture.

You must be able to: Work despite frequent interruptions; lift and carry cleaning equipment; and work carefully with consideration for persons who are ill.

JOB CLUSTER #13
"Personal Services"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	40	$3.50-$4.25/hr.		$3.50/hr

Because of varying rates of pay throughout Montana, specific information on salaries may be obtained at your nearby employment office or hospital.

HOURS OF WORK

The forty-hour workweek is standard. You may have to work holidays and weekends and may have night shifts.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

- -health insurance
- -paid overtime
- -paid vacations
- -retirement plans
- -free meals
- -uniforms laundered

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Contact the personnel department of your local hospital for further information.

ADDITIONAL SOURCES OF INFORMATION:

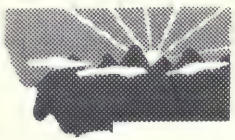
Your school counselor and librarian may also help you find additional information

American Hospital Association
840 North Lakeshore Drive
Chicago, Illinois 60611

NEHA National Office
Suite 202
Business and Professional Building
Gallipolis, Ohio 45631
(Telephone: (614) 446-4800)

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Housecleaner	323.687-018
Bellhop	324.677-010



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB:

ICE CREAM MACHINE OPERATOR
(D.O.T. NOVELTY MAKER I)

ICE CREAM MACHINE OPERATORS operate one or more of the various machines used in the processing of ice cream. They usually serve first as a general worker, and later train to run any one of the following: separator, mixer, freezer, hardening machines, pasteurizer, or packaging and labeling machines.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Dependable	Mechanical	Good general health
Thorough	Numerical	Free from communicable diseases
Able to take orders	Finger dexterity	Normal vision and hearing
Able to work with others		Eye-hand coordination
		Physical stamina

YOU SHOULD KNOW THAT

- -You must begin as a general ice cream processing worker and accumulate seniority before moving to better positions;
- -You will be trained on the job by your employer;
- -A high school education is preferred, but there are no set educational requirements.

YOU MUST BE ABLE TO

- -Learn fairly routine tasks such as counting number of products and adjusting machines;
- -For some machine jobs, lift fairly heavy objects;
- -Work for long periods standing or sitting;
- -Learn to operate, adjust, and sometimes repair complex machinery.

DOT 529.482-014

PREPARATION AND TRAINING:

High school education is generally preferred, although there is no set educational requirement. Some college training is not necessary, but candidates hoping to advance to managerial positions may benefit from advanced training.

RECOMMENDED HIGH SCHOOL COURSES:

English	Machine Shop
Business Math	Metal Shop

ADDITIONAL FACTS ABOUT TRAINING

Any experience in cannery or food processing work will be very helpful and may lead to quicker employment. Your employer will provide supervised on-the-job training during which time you will be taught to operate a machine, to make adjustments, and to do some minor repair work.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Turnover is relatively slow, mainly because the salary scale for an ice cream machine operator is relatively good.

There are some openings for qualified applicants, but the number of applicants is much greater than the number of openings.

Opportunities are not expected to increase greatly in the future.

ADVANCEMENT

With sufficient seniority and experience, the ice cream machine operator can advance to production supervisor or plant manager.

MORE ABOUT THE JOB:

The ice cream machine operator:

-Must work at least one year as an ice cream processing worker before being eligible for advancement to higher positions;
-Can be employed either year round or on a seasonal basis;
-Ice cream manufacturing firms experience peak season during the warmer summer months;
-Receives on-the-job training, usually in the form of supervised operation of various machines;
-Usually operates one or more of the machines described below.

TYPES OF ICE CREAM PROCESSING MACHINES

Separator	Pasteurizer
Clarifier	Hardening Machine
Cooler	Packaging Machine
Mixer	Labeler
Homogenizer	Freezing Machine

The operator must have knowledge of:

weigh scales	filters
agitators	pumps
temperature controls	pressure valves

JOB CLUSTER #9
"Manufacturing"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$4.00-$4.75/hr	$4.50/hr	$4.00/hr

Salaries may vary throughout the state. A local source should be checked for accurate salary information in your area.

HOURS OF WORK

The ice cream operator usually works the standard eight-hour shift five days a week. One can work an afternoon, morning or night shift. There may be some overtime or weekend work.

FRINGE BENEFITS

Depending on the length and place of employment, you may receive:

life insurance	sick leave	paid holiday
health medical plan	overtime pay	disability insurance
Social Security	paid vacation	

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Visit a local ice cream processing plant for further information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Buttermaker (dairy prod.)	529.362-010
Cheesemaker Helper	529.682-014
Flash-Drier Operator (corn prod.)	529.582-014

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MONTANA VIEW

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Department of Vocational and Occupational Services
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Helena, Montana 59601

THE JOB:

INFORMATION OPERATOR
(D.O.T. - DIRECTORY ASSISTANCE OPERATOR)

The INFORMATION OPERATOR receives local and long distance requests for numbers which the caller cannot find in a directory. She/he also intercepts calls for numbers which have been changed or disconnected.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Alert	Verbal	Eye-hand coordination
Tactful	Clerical	Good vision (natural or corrected)
Dependable	Numerical	No speech defects
Pleasant speaking voice		

YOU SHOULD KNOW THAT

-You may work day, swing, or graveyard shift;
-Weekend and holiday work may be required;
-You must be able to handle up to ninety calls per hour.

YOU MUST BE ABLE TO

-Sit at one work station for long periods of time;
-Work at a job which has little variation in daily routine;
-Locate numbers quickly and repeat them clearly and accurately.

D.O.T. 235.662-018

PREPARATION AND TRAINING:

High school graduation is preferred although not required. You should know that you will have to pass a series of tests which will be difficult if you have not completed school.

RECOMMENDED HIGH SCHOOL SUBJECTS:

English Public Speaking Spelling

Pay particular attention to spelling; if you cannot spell, you will not be able to locate alphabetical listings easily and quickly.

ADDITIONAL FACTS ABOUT TRAINING:

Training for this job is given in two weeks after hiring. A few candidates wash-out during training. You will be paid as you train.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Despite automation of information switchboard equipment, there is still a need for personnel because of increasing use of telephone services by homeowners and businesses.

There will not be a great increase in numbers of total employees; however, because of the rapid turnover, there will be many openings.

Openings are found in cities of all sizes; they are greatest in the metropolitan areas.

OPPORTUNITIES FOR ADVANCEMENT

Opportunities for advancement are somewhat limited to the person with minimum skills. However, operators with clerical training who show initiative may be advanced to service representative.

There are a few opportunities to advance as a chief operator or supervisor, but these are limited and only top people with long years of experience make it.

MORE ABOUT THE JOB:

The information operator receives local and long distance requests for telephone numbers.

They may come from people who are in a place where there is no local phone book, or desire numbers which are new or unlisted.

The information operator may:

-Look first at a list of frequently called numbers which is placed at eye level directly in front of the operator;
-Use a specially alphabetized telephone directory to locate personal numbers quickly;
-In the case of unlisted numbers, explain that the telephone company policy does not permit operators to give out these numbers;
-Refer troublesome callers to her/his supervisor;
-Intercept calls for numbers which have been disconnected or changed and advise the caller why the call has not been completed.

Speech and the correct use of grammar is basic in this job. Speed and accuracy are very important. Tact and courtesy are a must at all times. The telephone company is not interested in hiring workers who are late to work or who have a poor work attitude.

JOB CLUSTER #3
"Communications and Media"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$4.31-$7.25/hr	$5.00-$6.24/hr	$4.31/hr

Salaries may vary throughout the state. You may wish to check with a local source for salary information for your area.

HOURS OF WORK

The normal workweek is forty hours. However, you may be required to work on night shifts and may work Saturdays, Sundays, and holidays.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

paid overtime	vacation plan
health insurance	retirement

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

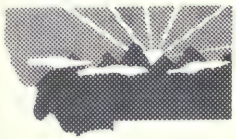
The personnel director of your local telephone company can provide you with further details.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information.

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Telephone-Answering-Service Operator	235.662-026
Switchboard Operator	235.562-014
Central-Office Operator	235.462-010



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: INSURANCE ADJUSTER

INSURANCE CLAIMS ADJUSTERS investigate and settle claims of losses suffered by policy holders of all kinds of insurance.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Tact	Numerical	Normal health
Emotionally stable	Clerical	Good vision and hearing (natural or corrected)
Neat appearance	Some mechanical	Absence of speech impediments
Precise		Normal use of arms and legs
Preference for working with people		

YOU SHOULD KNOW THAT

-A four-year college or university degree is usually required for entry in the field of insurance claims adjusting.
-Experienced claims adjusters enjoy considerable employment mobility.

YOU MUST BE ABLE TO

-Deal tactfully, yet forecfully with emotionally upset people in settling claims;
-Analyze many factors in arriving at decisions;
-Write reports clearly and accurately;
-Work both indoors and outdoors;
-Work under pressure consistently as well as objectively.

DOT 241.217-010

PREPARATION AND TRAINING:

The insurance adjuster must usually have a college or university degree to qualify for employment as a trainee. However, some qualify with a combination of some college and successful work experience in the insurance or other business fields.

COURSE OF STUDY INCLUDES:

High School: Recommended is a college preparatory program complete with sciences, mathematics, and a foreign language. Typing and public speaking and related classes are also recommended.

College: There is no standard major required. However, majors in business as well as in other areas may qualify.

ADDITIONAL FACTS ABOUT TRAINING:

Extracurricular activities, particularly those which help develop public contact skills such as debate and public speaking and clubwork is helpful at the high school and college levels. Evidence of stability and the desire for a career position are important factors in finding employment as a claims adjuster trainee.

SPECIAL ENTRY REQUIREMENTS:

-A degree from a four-year college or university, or some combination of higher education and work experience;
-Aptitude tests;
-Interviews;
-Physical examinations;
-A character evaluation consisting of a police record check and an evaluation of references given the employer.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

The majority of insurance workers, including claims adjusters, work in the larger cities.

Opportunities for well qualified applicants for entry jobs as adjuster trainees are good, but there is keen competition.

ADVANCEMENT

Claims adjusters employed by large insurance companies advance to positions as supervisors of claims departments or department heads.

Promotions within large companies require relocation to another city or state.

Some claims adjusters, after gaining considerable experience, enter the claims adjusting business for themselves.

MORE ABOUT THE JOB:

The basic function of the claims adjuster is to settle claims against insurance companies to the satisfaction of the policyholder as well as the insurance company.

The two major areas of concern to adjusters are losses of property and bodily injury. Adjusters tend to specialize in one or the other of these concerns.

In claims work involving both bodily injury and property damage, adjusters perform similar tasks. These are:

- -Verification of coverage on the part of the policyholder;
- -Determination of company liability relative to a claim;
- -Determination of the extent of the property loss or damage or the nature and seriousness of bodily injuries incurred;
- -Searching of statements of witnesses, police reports, and other pertinent data;
- -Negotiation in settlement of claims with claimants or their attorneys;
- -Preparing written reports of claims settled.

Most claims adjusters begin as trainees and handle uncomplicated small cases under close supervision until they gain experience in the field.

JOB CLUSTER #14
"Public Services"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$1160-$3402/mo	$1500-$1800/mo	$1160/mo

Most claims adjusters are paid a percentage of the amount of the loss adjustment.

HOURS OF WORK

Hours of work are usually regular. However, in emergency investigations, the adjuster may be called on at any hour of the day or night, including weekends.

FRINGE BENEFITS
Depending on length and place of employment, you may receive:

paid vacations	retirement plan	paid sick leave
paid holidays	life and health insurance	profit sharing plans on some jobs
Social Security	company automobile	

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

A local insurance agent or company may be able to provide you with more information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Insurance Information Institute
110 William Street
New York, New York 10038

National Association of Public Adjusters
1613 Munsey Building
Baltimore, Md. 21202

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Investigator, Bill Complaints (light, heat & power)	241.267-034
Claim Examiner (insurance)	241.267-018
Agent Contract Clerk	241.267-010

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MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: INSURANCE AGENT

INSURANCE SALES AGENTS sell insurance policies and contracts which protect lives and property against future loss as well as assist individuals and businesses in the planning aspects of insurance coverage.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits
Self Confident
Enthusiasm
Perseverance
Good appearance
Drive
Initiative
Outgoing personality
Honest

Aptitudes
Verbal
Clerical
Organization of time and work

Physical Abilities
Normal vision and hearing (natural or corrected)
Absence of distracting physical handicaps
Use of hands, fingers, legs, and feet

YOU SHOULD KNOW THAT

-You must have a competitive nature to succeed in the insurance business;
-You must obtain a license which requires specific knowledge of insurance laws in order to sell insurance;
-People who have physical handicaps which do not affect normal business relationships with people can become insurance agents;
-You must be conscientious and able to empathize with all classes of people;
-You must service accounts continually after they're sold.

YOU MUST BE ABLE TO - Work well with people and include verbal communication and persuasion as a regular part of the job;
-Perform your work in the evenings and on weekends as well as during the regular working hours;
-Rely on your own initiative and drive in order to be successful as an insurance agent;
-Give sales presentations which include demonstrations using charts and other aids.

DOT 250.257-010

PREPARATION AND TRAINING:

While there are generally no specific requirements, the prospective insurance agent should have at least a high school education and as much post-secondary training as possible.

The insurance agent will be trained in a company school or training program in necessary sales skills. He/she must continually learn new concepts and ideas relating to the field of insurance - facts and underwriting guidelines change continually, must be very receptive to change.

RECOMMENDED HIGH SCHOOL SUBJECTS:

Typing
English
Public Speaking
Bookkeeping
Accounting
Spelling
Filing
Basic Math

COURSE OF STUDY AFTER HIGH SCHOOL:

Some post-secondary education is strongly recommended. Courses should include:

Basic Economics
Basic Finance
Business Law, very important
Insurance
Sales
Liberal Arts courses
Public Speaking
Office Organization or Management Basics
Psychology

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities for insurance agents exist throughout the state.

Opportunities are greatest in urban areas.

Many openings exist because of a high turnover rate among beginning insurance agents.

Potential agents should choose a good solid company in the beginning.

ADVANCEMENT

Agents who are successful in sales work and who demonstrate management potential may be promoted to sales manager, agency manager, or other management level positions at home, district or national headquarters level.

Other promotions may include: underwriting, claims, customer service or public relations work.

MORE ABOUT THE JOB:

Insurance agents usually sell one or two basic types of insurance, life or property and liability (casualty insurance). The agent may also sell Surety Bonds, Mutual Funds, etc.

Life insurance agents sell policies which pay benefits to survivors at the death of the policyholder. Life agents also sell policies which provide benefits after a designated period of time for such purposes as educational expenses for college age children and retirement funds.

Agents who sell casualty insurance provide policies which guarantee benefits in the event of losses due to fire, theft, damage or other hazards to property.

Agents may be either:
an employee of an insurance company, or an individual insurance agent who may represent several companies.

Beginning agents are usually trained by their companies for a period of time, usually a few weeks to a few months. Training covers insurance principles and insurance techniques and problems.

Once licensed, the agent performs a number of duties in the course of a regular schedule:

-Discusses various policies with prospective clients (usually by appointment);
-Plans insurance programs to fit clients' needs;
-Prepares reports and applications.

JOB CLUSTER #12
"Marketing and Distribution"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary

Most agents work on commission alone. Usually beginners are guaranteed a minimum monthly salary plus commissions during the six-month break-in period. Check with a local agency regarding beginning salary policy.

Commissions for experienced sales agents may range from $17,670 to $23,860 per year. A number of established and highly successful agents and brokers earn more than $30,000 per year.

HOURS OF WORK

Working hours are unlimited depending upon the initiative and endurance of the individual. However, most agents find forty-eight hours a week average. Much night work is expected. Sometimes agents work mornings, take afternoons, off, return for home calls at night.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

medical insurance	paid vacations	percentage discounts
life insurance	paid holidays	contests with merchandise and trips to winners
retirement plan	profit sharing	

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Contact the State Insurance Commissioner for more information

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Insurance Information Institute
100 Williams Street
New York, NY 10038

Institute of Life Insurance
277 Park Avenue
New York, NY 10017

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Real Estate Agent	186.117-058
Sales Representative (Hotel and Restaurant)	259.157-014
Underwriter	169.167-058
Public Relations Representative	165.067-010
Claims Adjuster	241.217-010

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: INTERIOR DESIGNERS AND DECORATORS

INTERIOR DESIGNERS AND DECORATORS coordinate the selection of furniture, draperies, floor coverings, and other interior accessories for homes and commercial buildings. They strive for function as well as beauty design.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Creative	Sales ability	Good general health
Friendly	Numerical	Normal or corrected vision
Artistic	Clerical	Full use of arms and hands
Imaginative		Cannot be color blind
Good business judgement		Must be able to lift and climb
Attention to detail		

YOU SHOULD KNOW THAT

-Many of the interior designers and decorators belong to the American Institute of Interior Designers or the National Society of Interior Design;
-Most of the poeple going into this field have either had some college or technical school training (a growing number of four-year college graduates are also entering the field).

YOU MUST BE ABLE TO

-Plan, design, and execute building interiors and furnishings;
-Work in all kinds of weather;
-Provide your own transportation, depending on employers and situations;
-Sell all kinds of goods, services and materials;
-Work under pressure of deadlines.

DOT 142.051-014

PREPARATION AND TRAINING:

Entrance into the field of interior design is through a combination of academic study and on-the-job training. However, the amount of study and duration of training is not rigidly established. Natural ability plays a large part in determining both training time and success. High school graduation is a very minimum for entry into this field, and two years to four years of college training is preferred.

RECOMMENDED HIGH SCHOOL COURSES:

Speech	Mechanical Drawing
Math	Business Courses
Art	

POST HIGH SCHOOL TRAINING:

English	Mathematics	Graphic Arts
Communications	Design-Interior	Selling
Home Economics	Merchandising	Architecture
Bookkeeping	Art	History and Theory of Art

ADDITIONAL FACTS ABOUT TRAINING

Artistic, merchandising, and managerial skills are all needed in interior design. Creative ability in a designer can only be developed to its fullest extent by knowledge of every facet required of beginners. Ten years in training is considered normal. There are many exceptions to this.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities are limited throughout the state.

This field will grow as long as business activity is high.

Only those people with considerable training and experience should undertake going into this field.

Large department stores have become increasingly important sources for employment.

OPPORTUNITIES FOR ADVANCEMENT

Opportunities for advancement come fast to those who have the ability to progress at a rapid pace.

There are opportunities for professionals to own their own establishment.

MORE ABOUT THE JOB:

The interior designer:

-Holds interviews with clients;
-Is concerned with utility, economy, construction, and client satisfaction;
-Makes sketches and renderings;
-Works with colors, blueprints, designs, furniture, and fixtures;
-Oversees the many details in decorating;
-Orders materials;
-Contracts for workers and craft people;
-Supervises artists and contractors;
-Spends much time on the road with clients;
-Works in constant contact with people;
-Has to deal with a mass of paperwork;
-Must contend with annoyances and indecisive people.

JOB CLUSTER #7
"Arts and Humanities"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	May earn from $12,000-$50,000/year		

Designers and assistant designers may be paid straight salaries, salaries plus commissions or bonus, or straight commissions. Earnings are closely geared to sales, so income ranges are wide for both employed and self-employed designers.

HOURS OF WORK

Normally, forty to fifty hours per week. Many work nights and weekends, usually without overtime.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

salary plus commission
group health
group life insurance
consultant fees

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Employment Security Division
Box 1728
Helena, Montana 59601

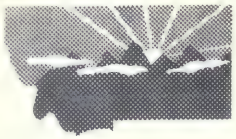
ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

American Institute of Interior Designers
683 Fifth Avenue
New York, New York 10022

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Display designer	142.051-010
Set Designer	142.061-050
Manager Display	142.031-014
Color Expert	141.051-010



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: JUVENILE OFFICER

The JUVENILE OFFICER's job is to enforce law and order among the youth of a community. The goal is to prevent young people from starting a life of crime. Because this task is not always possible, the juvenile officer also must investigate crimes committed by juveniles, make arrests, testify in court, counsel with parents and young offenders and work with probation officers.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Respect for the law	Verbal	Excellent health
Good judgement	Clerical	Good hearing
Desire to help youths	Numerical	Normal vision
Good personal appearance		No handicaps
Good attitude		

YOU SHOULD KNOW THAT

- -You will be required to learn about firearms of all kinds, although you will rarely use them;
- -You won't qualify if you have a police record or bad personal references;
- -Candidates must pass a rigid physical and mental examination;
- -After you are hired, you will receive classroom and on-the-job training;
- -Work may be dangerous;
- -An officer may be on call 24 hours a day.

YOU MUST BE ABLE TO

- -Keep calm under pressure;
- -Write clear, complete and accurate investigation reports;
- -Interview people and get information you need as quickly and easily as possible;
- -Learn to observe every detail of a crime scene.

DOT 375.367-010

PREPARATION AND TRAINING:

High school graduation is the absolute minimum. Some departments prefer four-year college graduates.

RECOMMENDED HIGH SCHOOL SUBJECTS:

English, speech, social studies, science are all part of the basic education you should have. Chemistry will give you important background for later courses in evidence analysis. Participation in sports will keep you physically fit. A juvenile officer writes many reports, so typing is a good subject to take as an elective.

Dawson Community College offers a course in law enforcement. Montana State University at Bozeman offers a program in law enforcement. College of Great Falls and Carroll College offer courses in criminal justice. University of Montana offers a degree in criminal justice with an emphasis in corrections.

PROSPECTS AND OPPORTUNITIES:

JOB AVAILABILITY TRENDS

Opportunities are best for well-qualified persons.

Most employment opportunities occur in metropolitan areas.

There are few juvenile officers in smaller towns.

ADVANCEMENT

Chances for advancement are good, coming in the form of salary increases.

Competition for promotion in rank is very keen.

MORE ABOUT THE JOB:

Unlike most police officers, juvenile officers do less initial investigative work and more follow-up work.

His/her job is to identify and apprehend juveniles found to be breaking the law. Evidence of a juvenile's guilt is uasually found by a patrol officer or detective at a crime scene. The juvenile officer then gets the case and attempts to locate the responsible person.

A good part of the juveile officer's work is of a counseling nature. A youth who is a first offender likely will not be put in jail or juvenile hall. The officer normally will talk with the offender and his/her parents and if their attitudes are good, the offender will be released until a hearing can be held.

The officer often testifies at informal and formal court hearings. They help the judge determine what form of corrective action should be taken. The youth who is sorry for the crime rarely gets a severe sentence. Those who flout the law are often given sentences reflecting their poor attitude.

In recent years, much of the juvenile officer's time has been spent in investigating preliminary reports of narcotics used by young people. These cases usually are investigated jointly by a juvenile officer and a narcotics squad officer.

Juvenile division officers also work with school groups, both in crime detection and prevention.

JOB CLUSTER #14
"Public Services"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$19,300/yr	$17,900/yr	$15,450/yr

Salaries may vary throughout the state. You may wish to check a local source for accurate salary information.

HOURS OF WORK

The normal workweek is forty hours, but when on a major investigation, an officer may work twenty or more hours a day. Shifts are often split, although the juvenile officer customarily works day shift unless on special assignment.

FRINGE BENEFITS

Depending on place and length of employment, you may receive:

- paid vacation
- sick leave
- life insurance
- medical insurance
- retirement plan
- free uniforms or uniform cleaning

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

The local police department may be able to provide further information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

International Association of Chiefs of Police
1319 18th Street Northwest
Washington, D.C. 20036

Peace Officers Standards and Training
1336 Helena Avenue
Helena, Montana 59601

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Detective	375.267-010
Police Officer	375.263-014
Game Warden	379.167-010
Park Ranger	169.167-042
Guard	372.667-034
Sheriff/Sheriff Deputy	377.263-010

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: KEYPUNCH OPERATOR

The KEYPUNCH OPERATOR uses a machine with a keyboard much like an electric typewriter, depressing proper keys in correct sequence to punch data into cards.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Dependable	Numerical	Eye-hand coordination
Neat	Clerical	Normal use of hands and arms
Accurate	Spatial	Good vision
Speed	Verbal	
Good memory	Finger dexterity	
Good concentration		

YOU SHOULD KNOW THAT

-You may have to work evening shifts and weekends as a beginner;
-You may have to work in a room with machines which make distracting noises.

YOU MUST BE ABLE TO

-Sit for long periods of time doing routine work speedily and accurately;
-Work alone under close supervision although you may work alongside other operators;
-Work under production pressure of a certain minimum number of cards punched correctly per hour;
-Do accurate work.

DOT 203.582-030

PREPARATION AND TRAINING:

You are usually required to have a high school diploma. Some on-the-job training will be available.

RECOMMENDED HIGH SCHOOL COURSES

English
Office Practice
Typing
Business Machines

ADDITIONAL FACTS ABOUT TRAINING

A post high school course may include:

-Manual operating of the keypunch machine;
-Transcription of figures, codes and description into a pre-determined format;
-May also include some experience in operation of other data processing machines.

Courses in keypunch operation are available at Butte Vocational Technical Center, Great Falls Vocational Technical Center, Helena Vocational Technical Center and Missoula Technical Center.

You may have to pass an aptitude test before being admitted to training classes. You may have to demonstrate proven efficiency on the machine before being hired. You will likely be hired on a trial basis until you have proven your ability to perform the minimum level of speed and accuracy demanded by the company.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

The need for highly skilled keypunch operators exists in large urban areas working for banks, insurance companies, industrial firms and government offices.

Technical advances in machine development may greatly reduce the need for keypunch operators in the next five to ten years. Thus, the competition for positions could become great.

ADVANCEMENT

Basically, the job is status with possible advancement at the level of supervisor. Advancement to tabulating machine and/or computer operator would require additional training.

MORE ABOUT THE JOB:

Once the data needed has been determined by other people, the keypunch operator punches the information from various source documents onto cards for future runs through a computer.

The operator transcribes the various figures, codes, or descriptions in a pre-determined format. Some operators transcribe numbers only, while others do both numerical and alphabetical recording of source information.

The keypunch operator may be required to learn a considerable number of specifications (patterns of instructions) for punching various types of cards.

Speed, accuracy, and concentration are essential. The work is often of a routine nature and does not require contact with people outside the keypunch section. However, all operators must be able to accept supervision and cooperate with fellow workers.

Specific operations include: attach previously punched program card around machine drum to control duplication and spacing of constant data; load machine with decks of punch cards; move switches and depress keys to select automatic or manual duplication and spacing; select alphabetic or numerical punching and transfer cards through machine stations; depress keys to transcribe new data in prescribed sequence from source material into perforations on cards; insert previously punched cards into card gauge to certify registration of punches; observe machine to detect faulty feeding, positioning, ejecting, or other malfunctions.

JOB CLUSTER #2
"Business and Office"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
36-40	$160-$250/wk	$220/wk	$160/wk

Salaries may vary throughout the state. Check a local source for salary information in your area.

HOURS OF WORK

Thirty-six to forty hours per week is standard. Some overtime is required and you may have to work swing, graveyard or day shift.

FRINGE BENEFITS
Depending on length and place of employment, you may receive:

- paid vacations
- sick leave benefits
- overtime
- hospital insurance
- company-paid life insurance

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Employment Security Division
Box 1728
Helena, Montana 59601

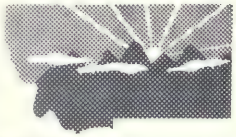
ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Data Processing Management Association
524 Busse Highway
Park Ridge, Illinois 60068

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Linotype operator	650.582-010
Photo composition keyboard operator (print. and pub.)	203.582-046
Varitype Operator (clerical)	203.382-026



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: KITCHEN HELPER

The KITCHEN HELPER assists the cook by performing a variety of routine unskilled duties. Some responsibilities of the kitchen helper are: keeping the kitchen area clean, setting tables, preparing food trays and assisting in the serving of trays.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Cooperative	Numerical	Normal vision and hearing
Responsible		Normal sense of smell
Dependable		Good physical health
Good personal hygiene		Average physical strength

YOU SHOULD KNOW THAT

-You won't qualify if: you have an active communicable disease; you have poor personal hygiene or unclean, unkempt personal appearance; or if you cannot read and write at least at an eighth grade level.

YOU MUST BE ABLE TO

-Lift and carry;
-Understand and carry out accurately written and spoken instructions;
-Be on your feet for long periods of time;
-Maintain high cleanliness standards;
-Withstand many odors, warm moist conditions and some unpleasant tasks.

DOT 318.687-010

PREPARATION AND TRAINING:

The kitchen helper has no specific educational requirements for the job. However, the helper should have at least an eighth grade education. On-the-job training will be available.

COURSE OF STUDY INCLUDES: (where available)

- Institutional Cooking
- Orientation, Safety and Sanitation
- Sanitary and Health Regulations for Food Handling
- Work Experience
- Elements of Food Management

ADDITIONAL FACTS ABOUT TRAINING

This is an entry occupation. Prior experience is helpful but not required. On-the-job training in kitchen procedures is given. Limited education prevents advancement on the job.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities are greatest in large institutions and in urban areas.

In general, job opportunities are expected to continue to grow with increased construction of health institutions and eating establishments.

ADVANCEMENT

With training and experience, a kitchen helper may advance to:

- cook's helper
- counter helper
- pantry helper
- waitress
- chef
- diet assistant
- cook

School systems, large factories and hospitals offer the greatest opportunities and security in being a kitchen helper.

MORE ABOUT THE JOB:

The kitchen helper has responsibility for the cleanliness of the kitchen and assists in routine duties wherever possible. The chef or cook supervises the kitchen helper's work. The kitchen helper carries out simpler tasks related to food preparation.

Exact duties will depend on where employed, but the kitchen helper performs a variety of unskilled duties in the kitchen such as:

- -Carry out garbage and wastes;
- -Obtain and distribute kitchen supplies;
- -Set up trays;
- -Help serve trays;
- -Dish up food;
- -Sweep and mop floors;
- -Carry supplies and foodstuffs;
- -Watch and stir foods;
- -Wash and scour pots and pans;
- -Clean and prepare vegetables;
- -Make toast and beverages.

In larger institutions and restaurants, the kitchen helper is more likely to perform a single task such as washing pots and pans, or at the most, two or three tasks during the course of a shift. In small establishments, the helper usually performs a greater variety of tasks.

JOB CLUSTER #12
"Personal Services"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$124-$150/wk	$135/wk	$124/wk

Salaries may vary throughout the state. You may wish to check with a local source for accurate salary information in your area.

HOURS OF WORK

May work split shifts and on holidays and weekends.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

- health insurance
- retirement plan
- free uniform laundry
- meals furnished

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Employment Security Division
Box 1728
Helena, Montana 59601

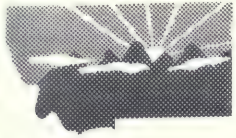
ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

National Institute for the Foodservice Industry
20 North Wacker Dr., Suite 2620
Chicago, IL 60606

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Cook helper, pastry (hotel rest.)	317.687-010
Scullion (water trans.)	318.687-014
Bar assistant	312.687-010
Counter Attendant	311.477-014



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB:

LABORATORY ASSISTANT (CERTIFIED)
CLA (ASCP) (D.O.T. MEDICAL LABORATORY ASSISTANT)

The CERTIFIED ASSISTANT, CLA, is a graduate of an accredited high school who has sucessfully completed the prescribed training course in an approved hospital school and who has passed the special examination based on this training. The CLA works under a medical technologist and pathologist or other qualified physician to assist in the performance of certain clinical laboratory tests.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Patient	Numerical	Good eye-hand coordination
Dependable	Clerical	Good vision
Able to follow directions carefully	Scientific	Average health
Attention to detail	Some mechanical	Full use of hands and arms
Able to reason		

YOU SHOULD KNOW THAT

- -You may face hazards from dangerous chemicals and must be safety-conscious at all times;
- -A background in chemistry is most important.

YOU MUST BE ABLE TO

- -Solve practical problems and interpret a variety of written and oral instructions;
- -Perform arithmetic calculations correctly;
- -Write clear and complete reports.

D.O.T. 078.381-010

PREPARATION AND TRAINING:

In addition to high school graduation, one year on the job training in an approved school for laboratory assistants and successful passage of examination administered by the American Society of Clinical Pathologists is required.

RECOMMENDED HIGH SCHOOL SUBJECTS

Science	Geology	Trigonometry
Chemistry	Algebra	English
Biology	Geometry	Speech

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Employers try to minimize high turnover among beginners by being highly selective in screening job applicants.

Opportunities in Montana are somewhat limited.

ADVANCEMENT

For those who wish to advance in this work, schooling must be a continuous process.

Constant study is necessary simply to keep up with new technology and workers are urged to keep up whether through private reading or in school.

Laboratory assistants may be promoted to technicians with more responsibility.

Further advancement depends on educational achievement but also on creative ability and imagination.

MORE ABOUT THE JOB:

As a certified laboratory assistant, you will be taking part in laboratory research, which is many times highly complex and demanding.

You may be asked to:

- -Clean and sterilize laboratory equipment;
- -Gather samples and materials;
- -Read gauges and meters, recording the readings and making notes;
- -Conduct routine tests and experiments;
- -Make computations and draw simple charts and graphs;
- -Write meaningful and precise reports.

You should know that:

- -This work requires alertness and accuracy in making and reporting observations;
- -Care in handling and using many scientific instruments;
- -In some cases, you may have to work with animals, plants or insects and care for them;
- -Some work may be carried on outdoors;
- -Some jobs, especially with government agencies, require security clearance.

JOB CLUSTER #8
"Health"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$10,600-$15,700/yr	$12,400/yr	$10,600/yr

HOURS OF WORK

The usual workweek is forty hours; however, some laboratories operate 24 hours a day with differential pay for workers on the swing and graveyard shifts.

FRINGE BENEFITS

Depending on place and length of employment, you may receive:

overtime pay	retirement plan	savings program
paid vacation	life insurance	health insurance

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Employment Security Division
Box 1728
Helena, Montana 59601

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

American Society of Clinical Pathologists
2100 W. Harrison St.
Chicago, Illinois 60612

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Laboratory Tester (various industries)	029.261-010
Testers (petroleum refineries)	029.261-022
Medical Laboratory Technician	078.381-014

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: LABORATORY ASSISTANT

A LABORATORY ASSISTANT performs many laboratory tasks, such as writing reports, cleaning equipment, making routine tests and, in certain laboratories, potting plants and care of animals and insects.

The LABORATORY ASSISTANT is employed by industries, universities, private laboratories and government agencies to assist technicians and scientists.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Reliable	Form perception	Good health
Honest	Clerical	Good eye-hand coordination
Orderly work habits	Numerical	Good motor coordination
Organized	Scientific	Finger dexterity
Adapt to routine situations	Some mechanical	

YOU SHOULD KNOW THAT

-Personal characteristics such as honesty and industry play a big part in getting a job;
-You may have to work with animals or insects;
-You may be working with dangerous chemicals and must be safety-conscious at all times.

YOU MUST BE ABLE TO

-Follow instructions carefully;
-Adapt to routine schedules and tasks;
-Perform simple addition and subtraction and read and write figures.

DOT 381.687-022

PREPARATION AND TRAINING:

A high school diploma or G.E.D. equivalency is required.

RECOMMENDED HIGH SCHOOL SUBJECTS:

General Science
Biology
Chemistry
Basic Arithmetic
English
Shop Courses

COURSE OF STUDY AFTER HIGH SCHOOL:

For this occupation, no further education after high school is necessary, but if you want to advance, some college training would be helpful.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Competition for jobs as laboratory assistants is keen as the turnover rate is low and the applicants numerous.

There are not many of these types of jobs in the State of Montana.

ADVANCEMENT

An interest in science and a good record of reliability, honesty, and industry are definitely helpful in getting a job as a laboratory helper.

These factors are also considered when it is decided who will receive training in more complex work and who will be promoted.

Promotion to lab technician can also be attained by more schooling in science subjects and through personal reading.

MORE ABOUT THE JOB:

As a laboratory assistant, your job will vary according to the projects being done in your laboratory.

You may be asked to:

-Wash equipment such as glassware, instruments, tables and test panels using solvents, brushes, and rags;
-Mix special detergents or acids for cleaning solutions and use them;
-Sterilize glassware and instruments;
-Label tubes and bottles and fill with specified solutions;
-Deliver supplies and laboratory specimens to the work area;
-Care for insects and animals according to specific directions;
-Tend to plant specimens and do potting of plants.

JOB CLUSTER #6
"Environment:

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	40	$800-$1000/mo	$850/mo	$800/mo

HOURS OF WORK

The workweek is usually 40 hours, although some work cleaning up after hours may be necessary.

FRINGE BENEFITS

Depending upon length and place of employment, you may receive:

- overtime pay
- paid vacation
- retirement plan
- life insurance
- savings program
- health insurance

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Employment Security Division
P.O. Box 1728
Helena, Montana 59601

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

American Institute of Biological Sciences
3900 Wisconsin Avenue N.W.
Washington, D.C. 20016

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Chemist	022.061-010
Dairy Lab Tester	029.361-014
Physicist	023.061-014
Health Physicist	079.021-010

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: LABORER (GENERAL)

LABORERS are employed by many kinds of private employers and public agencies. They perform a variety of services. Most of the work of the laborer is physical and may involve such things as construction, clean-up, driving, and digging, as well as numerous others.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Reliable	Some mechanical	Good general health
Accurate	Numerical	Above or average physical strength and stamina
Honest		Average eye-hand coordination
Good work habits		Good use of hands and fingers
Liking for routine activities		Normal vision and hearing (natural or corrected)
Able to follow directions		

YOU SHOULD KNOW THAT

- -Work for laborers in the construction trades and with some other private employers may be seasonal;
- -Laborers employed by public agencies work more regularly;
- -A poor work record or evidence of unreliability will hurt your chances of working as a laborer;
- -Union membership is required of some laborers, particularly in the construction industry.

YOU MUST BE ABLE TO

- -Perform hard physical labor though this requirement varies widely from job to job;
- -Work well with others;
- -Follow spoken instructions whether supervised or alone;
- -Follow standard routine when doing most jobs;
- -Work outdoors in bad weather as well as good on most jobs.

D.O.T. 869.664-014

PREPARATION AND TRAINING:

The laborer does not have to have a high school diploma for most jobs, though it may be necessary for eventual promotion. You will receive sufficient training on-the-job.

COURSE OF STUDY INCLUDES:

High School: Recommended courses include English, basic arithmetic, all kinds of shop courses, and physical education.

On-the-Job Training: Usually lasts from a few days to a few weeks and includes the routine of the job. It will vary widely depending on the business of the employer.

ADDITIONAL FACTS ABOUT TRAINING

Although formal educational requirements are unimportant in obtaining work as a laborer, you must, for most jobs, be able to read and write adequately. Of great importance in getting and keeping a job as a laborer is your reliability as demonstrated by your past work records. Laborers expecting to advance should have a high school diploma. Many unions are now requiring high school diploma or an equivalency.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities for general laborers exist throughout the state.

Opportunities are best in: construction companies, expanding areas, utility companies, local government agencies.

ADVANCEMENT

Advancement will consist primarily of pay raises and will depend on the initiative and training of the individual.

Opportunities for advancement are very limited.

MORE ABOUT THE JOB:

Laborers are basically unskilled workers who perform physical work usually using only simple machines, if any, and driving cars or light trucks.

Specific duties vary widely from job to job. Construction laborers are likely to perform some of the following:

- -Loading and unloading construction materials;
- -Stacking and unstacking materials;
- -Carrying materials, machines, and various other types of equipment from place to place as an aide to the building craftworkers;
- -Tearing down of structures;
- -Tearing down scaffolding;
- -Clearing and cleaning work sites.

Laborers who work for a city or county in a civil service job might perform the following:

- -Drive light trucks and three-wheeled vehicles;
- -Dig ditches and holes by hand;
- -Patrol isolated areas;
- -Perform loading and unloading; cleaning and clearing as does the construction laborer.

Most laborers, regardless of type of employer, work under close supervision the majority of the time.

JOB CLUSTER #4
"Construction"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	40	$5.30-$8.50/hr	$6.25-$6.75/hr	$5.30/hr

HOURS OF WORK
The normal workweek consists of forty hours, Monday through Friday. Most work is performed in the daytime hours except in emergency situations. Overtime is most frequent in emergencies and with construction workers in busy seasons.

FRINGE BENEFITS
Depending on length and place of employment, you may receive:

- paid vacations
- retirement plan
- paid holidays - non-construction jobs
- health and welfare plan

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

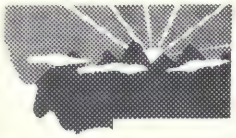
ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

International Hod Carriers, Building and Common Laborers' Union of America
905 16th Street, N.W.
Washington, D.C. 20006

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Construction Marker	869.664-014
Surveyor Helper	869.567-010
Timber Framer	869.381-034



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: LATHER

LATHERS install the supporting backing on ceilings or walls on which plaster or other materials are applied. The supports are usually metal laths (strips of expanded metal or metal wire mesh, or large pieces of perforated or unperforated gypsum laths).

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Accurate	Mechanical	Good health
Precise	Numerical	Average or above physical strength and endurance
Dependable	Finger dexterity	Normal vision and hearing
Good judgement		

YOU SHOULD KNOW THAT

- -Aptitude tests are given to applicants to determine whether they have manual and finger dexterity;
- -You usually must serve an apprenticeship period.

YOU MUST BE ABLE TO

- -Be on your feet throughout the work day;
- -Be able to stoop, squat, reach, and lift to perform duties;
- -Work from ladder and scaffolding;
- -Work in unfinished buildings that may be cold and drafty.

D.O.T 842.361-010

PREPARATION AND TRAINING:

A high school education is encouraged; particularly courses in mathematics are needed to understand classroom instruction.

Many lathers, especially in small communities, acquire their skills informally by working as helpers with contractors and experienced lathers.

Where available, apprenticeship is the recommended method of learning the trade. Apprenticeship programs are under the supervision of a local joint labor management apprenticeship committee. The term of apprenticeship for lather is usually thirty-six months.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Most lathers work for lathing and plastering constractors on new residential, commercial, or industrial construction.

Some lathers are employed outside the construction industry; for example, they may make the lath backing for plastered display materials for scenery.

There are not a large number of jobs in the state of Montana for a lather.

OPPORTUNITIES FOR ADVANCEMENT

A journeyman laborer who has exceptional skill and leadership ability may advance to crew foreman in full charge of specific jobs.

Some lathers go into business for themselves as lathing, lathing and plastering, or general contractors.

MORE ABOUT THE JOB:

In a building where plaster is to be used, the lather goes to work after the framework of the building has been built and the insulation is put in, but before any interior finishing is done.

The lather puts up the supporting backing or base on ceilings and walls on which plaster is to be applied. These plaster bases are usually strips of perforated expanded metal or wire mesh or pieces of gypsum board.

When installing metal lath, the lather first builds a light metal framework called furring. He/she uses wire to tie to building framework or studs materials known as pencil rod (metal wire about as thick as a pencil) or metal channel iron (a u-shaped metal rod). The furring is fastened securely to the basic structural framework of the building creating a space of insulation and for piping ducts and electrical fixtures. The lath is then attached to the furring by nailing, clipping, wire tying, or machine stapling.

After the lath has been installed, the lather cuts openings in the lath for electrical outlets and heating, ventilating, and plumbing pipes.

The lather's job may include setting up scaffolding for work on upper walls and ceilings.

Tools the lather uses include measuring rules or tapes, drills, hammers, chisels, hacksaws, shears, wire cutters, bolt cutters, punches, pliers, hatchets, plumb bobs, levels, chalk lines, stapling machines, and welding machines.

JOB CLUSTER #4
"Construction"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	40	$10.05/hour		

Salaries may vary throughout the state. Check a local union or other source for information for a specific area.

HOURS OF WORK

Lathers work eight hours a day, five days a week. They are paid at a rate of at least time and a half for overtime. Inclement weather and lack of contracts may cause layoffs.

FRINGE BENEFITS

Depending on length and place of employment, you may receive health insurance, life insurance, and pensions.

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Check the yellow pages of the phone book for lathing, plastering or general contractors.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

National Bureau of Lathing and Plastering
938 K Street, Northwest
Washington, D.C. 20001

The Wood, Wire, and Metal Lathers' International Union
6530 New Hampshire Avenue
Tacoma Park, Maryland 20012

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Plasterer (construction)	842.361-018
Plasterer, Molding (conc. prod; construction)	842.361-026
Dry-wall Applicator	842.381-010

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: LAUNDRY WORKERS

LAUNDRY WORKERS may perform one or a number of tasks required in the operation of a commercial clothes washing establishment. They may work for family laundries, large commercial laundries, or towel and uniform rental services. Jobs also exist at hospitals and some other large institutions.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Clean	Mechanical	Normal health
Dependable	Numerical	Good vision and hearing (natural or corrected)
Efficient	Clerical	Eye-hand coordination
Good judgement		Physical stamina
Careful work habits		Full use of hands

YOU SHOULD KNOW THAT

- You may be required to join a union;
- Hazards include burns from hot water and steam, and slipping on wet floors;
- You must be able to follow all types of instructions, whether they are written, oral, or in schedule form.

YOU MUST BE ABLE TO

- Work in routine and repetitious situations;
- Do the job assigned to you correctly and with considerable speed;
- Work in heat caused from hot water and steam;
- Do strenuous work such as lifting and carrying bundles, stretching and bending;
- Work on your feet a good part of the day.

D.O.T 361.685-018

PREPARATION AND TRAINING:

There are no special educational requirements for laundry workers. An eighth grade education or a year or two of high school will qualify you for most production jobs.

RECOMMENDED HIGH SCHOOL SUBJECTS:

You should take some mechanic courses if you plan to go on to maintenance jobs in the laundry.

ADDITIONAL FACTS ABOUT TRAINING

Usually all or nearly all of the training for laundry jobs is on-the-job. Training can consist of a few days or a few months, depending on the individual and the employer. For those who wish to improve their chances of employment or advancement later, or especially for those who plan on owning their own establishment, classes can be taken to provide a background in supervision.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities for laundry workers exist throughout the state.

Opportunities are good due to the high turnover rate among workers.

The introduction of automated laundering techniques and the use of some new fabric has slowed the rate of growth, but new workers will continue to be needed in future years.

OPPORTUNITIES FOR ADVANCEMENT

Laundry workers may become head washers, supervisors, or plant superintendent.

Eager, qualified workers in towel or uniform service businesses may become route sales people.

Additional formal training is often required for workers aspiring to supervisory jobs.

Advancement is often dependent on the speed of the worker.

MORE ABOUT THE JOB:

There are many different kinds of jobs in a laundry. They include:

1. The Sorter who divides the laundry by colors and kinds of cloth.
2. The Washing Machine Operator who adds detergents and sets the water temperature.
3. The Extractor Operators who work the driers.
4. The Shakers who shake the folds and creases from the clothes after they have come from the drying machines.
5. The Feeders who spread the clothing on a moving belt so that each piece enters the ironer in the right way.
6. The Presser who uses different types of machines to press different parts of the clothing.
7. The Folder who folds ironed clothing.
8. The Menders who sew on buttons and make other sewing repairs.

JOB CLUSTER #13
"Personal Services"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$130-$150/wk	$140/wk	$130/wk

Salaries may vary throughout the state. Unions greatly influence salaries. You may wish to check a local source for accurate salary information for your area.

HOURS OF WORK

Usually the workweek is forty hours, five days a week. Workshifts are usually 8:00 a.m. to 5:00 p.m. or 7:00 a.m. to 4:00 p.m. with one hour for lunch.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

- furnished uniforms
- retirement plan
- paid overtime
- health and life insurance
- sick leave
- paid vacation and holidays

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

A local laundry can provide you with further information.

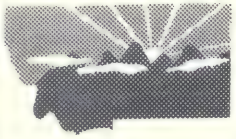
ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

International Union of Laundry, Dry Cleaning, and Dye House Workers
360 North Michigan Avenue
Chicago, Illinois

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Dry cleaner	362.382-014
Fur cleaner	362.684-014
Furniture cleaner	362.684-022
Leather cleaner	362.684-026
Blocker (clean, dye, and press)	363.684-010



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: LAWYER

LAWYERS, self-employed and employed by law firms, businesses, and by public agencies, represent clients in civil and criminal proceedings. Specific duties are many and are performed both in and out of court and depend on the nature of the employer.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Poise	Intelligent	Normal health
Self confidence	Clerical	Normal vision and hearing
Intellectual capacity	Numerical	
Intellectual curiosity	Spatial	
Interest in reading		
Accurate and orderly work habits		
Patience		
High moral and ethical standards		

YOU SHOULD KNOW THAT

- In most cases, education past high school includes seven full years, four of college and three of law school;
- Evidence of good character is essential in order to qualify;
- The cost of training is very similar to that of a doctor or dentist.

YOU MUST BE ABLE TO

- Concentrate on a single problem for long periods of time;
- For most jobs, express yourself verbally and in written fashion in clear and persuasive language;
- Relate well to people and be able to counsel them in terms of their problems in relation to your knowledge of the law;
- Exercise judgement applying your knowledge of large numbers of abstract legal principles to specific problems.

DOT 110.107-010

PREPARATION AND TRAINING:

The lawyer must be a high school and college graduate. Some are admitted to law schools with less than a bachelor's degree; however, most are college graduates. In order to practice as a lawyer, you must have a law degree from an accredited law school and pass a difficult qualifying test, the bar examination.

THE COURSE OF STUDY INCLUDES:

High School: A college preparatory major including mathematics, sciences, social studies, and a foreign language is recommended.

College: A wide variety of majors are acceptable, depending on the law school the student wishes to attend. Work in economics, history, speech, psychology, political science, philosophy, English composition, literature, general studies, and other fields are desirable.

Law School: The law school course is prescribed by the faculty of the school and is three years in length. Montana has a law school located in conjunction with the University of Montana in Missoula.

ADDITIONAL FACTS ABOUT TRAINING

Entrance requirements for law students vary with college grades, major taken, aptitude test scores (which must be taken), number of college years completed, and other factors depending on the law school.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities exist with city, county, state, and federal government agencies, with companies and corporations, with law firms, and in self-employment as well as with title companies, banks, and others. Government positions are increasing.

OPPORTUNITIES FOR ADVANCEMENT

Advancement takes many forms. In government service, civil service raises and position advancements are normal.

In private practice with a law firm, eventual partnership in the firm with its increased financial rewards is the usual practice.

Lawyers who are self-employed advance by expanding their clientele, bringing more and higher fees.

MORE ABOUT THE JOB:

If you were a lawyer, you would conduct civil and criminal law suits, draw up legal documents, advise clients as to legal rights, and practice other phases of the law.

Your duties might be to:

-Gather evidence in divorce, civil, criminal, and other cases to formulate defense or to initiate legal action;
-Represent clients in court and before quasi-judicial or administrative agencies of government;
-Act as trustee, guardian, or executor in legal proceedings;
-Specialize in a particular area of the law, such as corporation, patent, international, criminal, probate, real estate, and other fields;
-Conduct negotiations in lieu of legal proceedings in domestic, civil, and criminal matters.

The amount of time you would typically spend performing any of the tasks listed above depend on the nature of your employer or the nature of your own practice if you were self-employed.

JOB CLUSTER #13
"Personal Services"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
Vary	$12,000-$29,000/yr	$15,900-$19,200/yr	$12,000/yr

HOURS OF WORK
In civil service, hours are regularly 40 per week, Monday through Friday. Lawyers who are self-employed or in a private law firm may work more or less, depending on needs at a given time. However, most lawyers do work at home and at irregular times, including many nights and weekends--especially for those beginning practice.

FRINGE BENEFITS
Depending on length and place of employment, you may receive:

- paid vacation
- sick leave
- group insurance (life and health)
- paid holidays
- retirement plan
- regularly scheduled pay raises--civil service

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

University of Montana School of Law
Missoula, Montana 59801

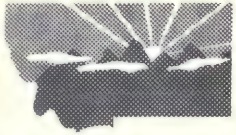
ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Information Service
The American Bar Association
1155 East 60th Street
Chicago, Illinois 60637

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Lawyer, Criminal	110.107-014
District Attorney	110.117-010
Judge	111.107-010
Paralegal Assistant	119.267-026
Legal Secretary	201.362-010
Legal Investigator	119.267-022



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: LEGAL SECRETARY

The LEGAL SECRETARY performs general secretarial work for an attorney or law firm. In addition, she prepares legal papers and correspondence of a legal nature, such as summonses, complaints, motions, and subpoenas.

(The Legal Stenographer performs clerical duties, filing, opening mail, and takes dictation of a general nature.)

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Pride in work	Facility with words	Good general health
Neatness	Form perception	Normal eyesight
Accuracy	Motor coordination	Normal hearing
Calmness and patience	Clerical	Finger dexterity
Discretion	Numerical	
Diplomacy	Research abilities	
Tact		

YOU SHOULD KNOW THAT

- -Most of the information a legal secretary handles is confidential, and his/her attitude about it reflects on his/her employer's reputation, as well as on his/her own;
- -There may be times when the work demands extra effort or hours;
- -The legal secretary must be a good speller and should have a good knowledge of English composition;
- -Many times lawyers depend on their secretaries to complete vital documents;
- -There are many phases of law and each requires special knowledge.

YOU MUST BE ABLE TO

- -Prepare accurate and neat papers which become permanent records;
- -Pay close attention to detail;
- -Think logically and clearly to present facts so that others understand them;
- -Type from shorthand or from a transcribing machine without making any mistakes.

D.O.T 201.362-010

PREPARATION AND TRAINING:

Many legal secretaries begin their careers upon graduation from high school. However, in some cases, two years of junior college or business college are required.

Some lawyers in private practice or in firms with legal departments are willing to train secretaries in the legal aspects of this work on the job. However, opportunities for legal secretary trainee positions are not numerous. Many employers are reluctant to hire inexperienced persons because of time pressures and demand for extreme accuracy in the legal profession.

Any special courses in law could add to one's knowledge and interest in the job; law courses are often available in adult education evening classes at high schools or colleges.

Some colleges have courses specifically designed to prepare students for legal secretarial work.

Contact your counselor for information concerning which colleges or vo-tech centers have courses specifically designed to prepare students for legal secretarial careers.

SUGGESTED HIGH SCHOOL COURSES:

shorthand	office machines	bookkeeping	Latin (may be of help in understanding legal terminology)
typing	general business	grammar	

Some employers expect applicants to have from two to five years recent experience in a law office, but many others will employ a person with a good record in previous secretarial work. Experience may be gained by working as a receptionist, typist, or stenographer in a large law office or in the legal departments of insurance, banking, real estate, or manufacturing firms.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

The demands for workers with secretarial skills remains high; since legal secretaries are, in a sense, specialized workers, shortages are particularly keen in this career field.

Large and small law firms, legal departments of banks, insurance companies, real estate firms as well as federal, state, and local courts employ legal secretaries.

There is a constant demand for experienced legal secretaries in all parts of Montana.

OPPORTUNITIES FOR ADVANCEMENT

Advancement would probably be in the form of a higher salary or by way of supervision of other secretaries.

The National Association of Legal Secretaries has developed an exam for certifying Professional Legal Secretaries. Passing it designates you as a "Professional Legal Secretary". One must have at least five years experience as a legal secretary in order to qualify to take the exam.

MORE ABOUT THE JOB:

The legal secretary is a specialist.
Besides being proficient in all the duties performed by a secretary, she/he must be familiar with terms used in the practice of the law and is acquainted with court structures and procedures.
She/he prepares and files legal documents, makes appointments, keeps a record of their employer's schedule, handles correspondence and telephone calls, and performs any other necessary duties to better the efficiency of the office.
There are many phases of law and each requires special knowledge. For instance, a secretary's employer may be a patent, criminal, probate, real estate, corporation tax, internal relations or domestic relations lawyer, or in some other specific specialty.
However, most offices in Montana are of a general practice requiring knowledge in all fields.
The legal secretary, because she/he works with important documents, must be accurate and extermely careful not to make mistakes.
She/he must work fast and be willing to retype if necessary so that a document is perfect in terminology, spelling, exact meaning, appearance and punctuation.
Legal secretaries divide their time among many tasks; taking dictation, typing, keeping books and other desk work.
A pleasing personality and ability to get along with the employer, co-workers and the public are essential qualities for a successful legal secretary.
The legal secretary should have a good memory for names, faces and legal terms.
Above all, legal secretaries must be able to hold in strict confidence all information concerning business of their employer and clients served by the employer.

JOB CLUSTER #2
"Business and Office"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40-44	$817-$991/mo	$893/mo	$817/mo

For salary information in your area of the state, check with your local employment office or with the local chapter of the Montana Association of Legal Secretaries.

HOURS OF WORK
A legal secretary generally works from 35-44 hours a week in most offices. Extra hours may be necessary to complete a special project and/or help the employer prepare for a courtroom appearance.

FRINGE BENEFITS
Depending on length and place of employment, you may receive:

- paid vacation
- paid holidays
- sick leave
- health insurance
- life insurance
- retirement plan

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office
Contact a secretary in a local law firm or speak to a lawyer.

Check with your local Chamber of Commerce to find out who in your area to contact for the Montana Association of Legal Secretaries.

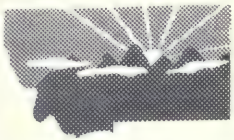
ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

National Association of Legal Secretaries
3005 East Skelly Drive
Tulsa, Oklahoma 74105

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Medical Secretary	201.362-014
School Secretary	201.362-022
Stenographer	202.362-014



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: LENS GRINDER (PRECISION)

A LENS GRINDER tends machines which surface eyeglass blanks for correct power and thickness; and works under supervision to prepare lenses for optometrists' or opthamologists' prescriptions.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Patient	Mechanical	Keen sense of touch
Persistent	Numerical	Steady hands
Dependable	Spatial	Good close range vision (natural or corrected)
Attention to detail	Eye-hand coordination	
Able to concentrate	Finger dexterity	

YOU SHOULD KNOW THAT

-One slip-up can mean imperfect eyeglass lenses which must be thrown away;
-The job is primarily an indoors job and the work is sedentary;
-People without full use of lower limbs may do this work.

YOU MUST BE ABLE TO

-Concentrate; lense griding is a precision skill;
-Use eyes continuously;
-Work rapidly and accurately.

D.O.T. 716.382-018

PREPARATION AND TRAINING:

High school graduation is the minimum. Some employers prefer some college training or a trade school graduate.

RECOMMENDED HIGH SCHOOL SUBJECTS:

Mechanics	Speech
Mathematics	English
Physics	Electricity Shop

COURSE OF STUDY AFTER HIGH SCHOOL:

Formal schooling is generally not required. Most employees learn their skills on the job. Training generally takes up to five years, depending on the skills learned and the ability of the worker.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

The increasing use of contact lenses plus automated machine grinding techniques is holding down the number of new job openings.

Lense grinders are employed mostly by wholesale optical laboratories and some by retail firms.

Employment exists in medium sized and large cities.

OPPORTUNITIES FOR ADVANCEMENT

Chances for advancement are good for the skilled, hard worker.

MORE ABOUT THE JOB:

The optical lense grinder makes eyeglass lenses to exact specifications. In contrast to the precision lense grinder who deals with tolerances of a millionth of an inch, the optical grinder need only meet tolerances of several thousandths of an inch to be accurate enough for the specifications.

The optical lense grinder exercises great care and skill while grinding two or more corrections into a single lense. Application of fine manual skill characterizes all phases of the work of the optical lense grinder.

There are about 200 kinds of optical glass, more than thirty of which are in common use. Optical glass has distinct and unique physical and optical properties with which the lense grinder should be familiar. Each piece must be carefully identified, marked, and stored by the grinder.

As a rule, the grinding process starts with blocking the blank (carefully attaching it to an appropriate cast iron block or fixture with special adhesive) so that it can be set up in the grinding machines. This leaves one face exposed to grinding so that it is necessary to reblock for work on the other face. Several blockings, each more precise, are required on a given lense. For grinding, the grinder sets up and operates curve generators, surface grinders, and other machines that use diamond, carborunjum and emery grinding wheels. The rough ground lense is then reblocked and in the polishing room, using more refined tools, is polished.

JOB CLUSTER #10
"Manufacturing"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$6.30-$8.00/hr	$6.75-$7.50/hr	$6.30-$6.80/hr

HOURS OF WORK

The normal workweek is forty hours, Monday through Friday, 8 a.m. to 5 p.m. Some plants still require Saturday work. Overtime or holiday work is rare.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

- paid vacations
- paid holidays
- sick leave
- retirement plan
- health insurance
- profit sharing

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Optical Wholesalers Association
222 West Adams Street
Chicago, Illinois 60606

International Union of Electrical, Radio, and Machine Workers
1126 16th Street Northwest
Washington, D.C. 20036

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Lathe Operator, Contact Lens	716.382-010
Glass Cutter, Hand	716.681-014
Eyeglass Lens Cutter	716.682-010

D.O.T. Fourth Edition, page 689

MONTANA VIEW

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THE JOB: LIBRARIAN

Professional LIBRARIANS are responsible for the task of recording, arranging, and otherwise making information available for use to large numbers of people. Librarians may handle books, films, periodicals, documents, and other media used in the transmission of information.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Intellectual curiosity	Intelligent	Good health
Interest in helping others	Numerical	Good vision (natural or corrected)
Interest in books	Clerical	Able to move about
Attention to detail		Able to use hands, fingers and arms normally
Tolerance for routine		

YOU SHOULD KNOW THAT

- -To qualify as an entry level professional librarian, you must complete at least the B.A. degree from a four-year college or university;
- -Qualified men and women with certain physical handicaps may be successful as librarians provided the handicap does not interfere with the job duties;
- -Working conditions for most librarians are indoors, safe, and pleasant.

YOU MUST BE ABLE TO

- -For most library jobs, reach, stoop, bend, and carry several books at a time;
- -Speak and write English clearly and accurately;
- -For some jobs, speak well in front of groups and in discussions;
- -Perform basic arithmetic operations quickly and correctly.

DOT 100.127-014

PREPARATION AND TRAINING:

The professional librarian can qualify for most jobs with a Master's degree; for some entry jobs, a B.A. degree will qualify. He/she can occasionally qualify with less than the B.A. or B.S. degree with some professional work in a library in addition to some college.

COURSE OF STUDY INCLUDES:

High School: A college preparatory major including mathematics, a foreign language, and sciences including a lab is recommended. Typing is helpful.

College or University: Some colleges offer an undergraduate major in library science while others offer only graduate training leading to the master of library science degree. Undergraduate majors in many fields may be acceptable for entry work, although some entry jobs require training specifically in library science, either at the B.A.-B.S. degree level or the master of library science degree level.

ADDITIONAL FACTS ABOUT TRAINING

It should be emphasized that the interested student should attain proficiency in at least one foreign language during the years of study. In recent years, some knowledge of mathematics and the basic elements of data processing for use in storage and retrieval systems is becoming important for the librarian who expects to advance in the profession.

SPECIAL ENTRY REQUIREMENTS:

To qualify for a job as a school librarian, in most school districts the librarian must qualify for a state credential in library science. Depending on the nature of the employer, special entry requirements may include some of the following:

- -The possession of a Bachelor's or Master's degree;
- -A degree in library science;
- -State credential for school library jobs.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities for qualified individuals are good; however, competition is keen.

The projected opportunities in Montana indicate for the years 1980-1990 the industry expansion will be 20; replacement needs 50; total jobs available for this period 70.

ADVANCEMENT

Promotional opportunities depend largely on the type of library or library system employing the individual librarian.

Opportunities for top administration jobs are best for those with advanced degrees.

MORE ABOUT THE JOB:

Two basic areas of the work of the libararian are reader's services and technical services. Involved in reader services are the direct services to users such as advice and guidance regarding where to look for particular kinds of information, what books, periodicals, and other works are in a library on a given subject, how best to use various library materials, and related services direct to users.

Technical services are those performed by librarians involving methods of classification and arranging of materials within the library, interlibrary arrangements, indexing, cataloging, purchasing of books and other materials, and other necessary internal functions.

Librarians, depending on the size and function of the library where they work, may work in one of the basic areas of library science. They are also likely to specialize in one of the following areas of work frequently found in large libraries. They are:

-Acquisitions;
-Cataloging;
-Child and young adult services.

JOB CLUSTER #14
"Public Services"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$12,929-$14,194/yr	$13,000/yr	$12,929/yr

Salary levels shown are for those with at least a Master's degree in library science. Librarians in universities receive higher salaries.

HOURS OF WORK
School librarians work Monday through Friday, about 35 hours. College and university librarians work a standard forty hour week as do those with most public and private libraries. Evening and weekend work is sometimes required, usually assigned on a rotating basis.

FRINGE BENEFITS
Depending on length and place of employment, you may receive:

retirement benefits
paid vacations and holidays
tuition refund program
premium pay or compensatory time off for overtime

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Montana State Library
930 East Lyndale Avenue
Helena, Montana 59601

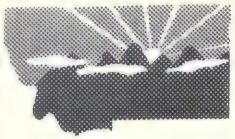
ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

American Library Association
50 East Huron Street
Chicago, Illinois 60611

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Librarian, Head	100.127-010
Library Administrator	100.117-010
Bookmobile Librarian	100.167-014



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: LIBRARY ASSISTANTS

LIBRARY ASSISTANTS help professional librarians by performing such duties as checking out books, shelving books and doing other work not requiring professional library training.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Alert	Clerical	Good health
Pleasant personality	Numerical	Good vision and hearing (natural or corrected)
Adaptable to routine tasks		Able to handle, lift, and carry light loads
Able to work with people		
Pay attention to detail		
Prefer serving others		

YOU SHOULD KNOW THAT

- Many clerks work part-time while attending high school or college;
- Some handicapped workers may hold jobs as library assistants.

YOU MUST BE ABLE TO

- Stoop, bend, stretch and carry light to moderate loads of books;
- Follow set procedures and methods of doing a job;
- Deal with questions, inquiries and problems of library users.

D.O.T. 249.367-046

PREPARATION AND TRAINING:

A library assistant should have a high school education or the equivalent in experience as determined by the employer. You can increase employment opportunities by completing some college work.

THE COURSE OF STUDY INCLUDES:

High School: Classes in English are particularly important. Also valuable are physical science and foreign languages. Typing is also useful.

College: Course in sociology, psychology, foreign language, literature and classes in library science are recommended.

ADDITIONAL FACTS ABOUT TRAINING

Many jobs require some college or some paid full or part-time work in a library or office. Other jobs require college attendance, some more than two years. Some jobs require that the applicant be able to type between 25 and 40 words per minute.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Library assistants are employed by municipal, county, government, college, high school and private libraries.

Many jobs are found in large cities and university and college towns.

There are limited opportunities in this state.

ADVANCEMENT

Opportunities vary widely depending on education and your particular employer.

For nonprofessional library assistants with two years or less of college training, most advancement occurs in the form of regular pay raises and preferred assignments.

Student workers pursuing a library science major may advance on graduation to professional librarian positions.

MORE ABOUT THE JOB:

The duties of library assistants, aides and other nonprofessional library workers vary widely from job to job. Typically, the assistant will perform tasks related to one or more of the following standard library functions:

-Circulation, reserving, checking out and renewing books;
-Sending overdue notices and collecting fines;
-Acquisitions involving the purchase of new books and verifying that the library does not already own suggested purchases;
-Cataloging, which includes the identification of books on cards for purposes of filing, referencing and cross-referencing;
-Shelving and filing consists of placing books and other materials in their proper places in accordance with the library classification scheme;
-Material upkeep, includes binding, re-binding, mending and cleaning books and other library materials.

Actual tasks performed by the library assistant or aide may include one or more of the following: filing books and other materials; typing cards and other materials; lifting, carrying and shelving books and other materials; giving information in person or over a telephone; checking out books and providing other direct contact service.

JOB CLUSTER #2
"Business and Office"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$160-$200/wk	$175-$185/wk	$160/wk

HOURS OF WORK

Forty hours per week is the standard workweek for full-time library assistants. Evening and weekend work is often required. Part-time workers usually work between ten and thirty hours per week, often in the evening.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

group insurance
Civil Service tenure
paid vacations
health insurance
educational assistance programs
sick leave

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Montana State Library
930 East Lyndale Avenue
Helena, Montana 59601

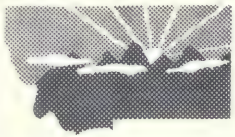
ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

American Library Association
50 East Huron Street
Chicago, Illinois 60611

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Order clerk (clerical)	249.367-054
Registration clerk	249.365-010
Counter clerk	249.362-010



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: LICENSED PRACTICAL NURSE

LICENSED PRACTICAL NURSES provide skilled nursing care to sick, injured and convalescent patients. They work under the general supervision of physicians and registered nurses and may sometimes supervise nursing aides, orderlies and attendants. They work in hospitals, private homes, doctors' offices or clinics.

All states regulate the preparation and licensing of L.P.N.'s. Requirements include completion of an approved course of instruction and passing a licensing examination.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Patience	Mental alertness	Good physical health
Understanding	Manual dexterity	Normal or corrected
Emotionally stable	Motor coordination	vision, hearing and
Dependable	Verbal	color perception
Mature	Numerical	Finger dexterity
Good judgement		Full use of limbs
		Strength and stamina
		Eye-hand coordination

YOU SHOULD KNOW THAT

-Graduation from an accredited vocational nursing school is necessary for taking the state licensing examination;
-You must pass a physical examination each year; depending on where you work;
-Good mental health is important.

YOU MUST BE ABLE TO

-Accept the responsibility of caring for human life;
-Follow directions exactly and rapidly;
-Learn and apply technical information;
-Show tactfulness and resourcefulness in dealing with patients.

DOT 079.374-014

PREPARATION AND TRAINING:

For admission to most schools of vocational nursing, a high school diploma is necessary for those under eighteen years of age. For adults, a high school diploma or G.E.D. certificate is required.

RECOMMENDED HIGH SCHOOL SUBJECTS:

English
Basic Math
Typing
General Science
Chemistry

COURSE OF STUDY AFTER HIGH SCHOOL

The licensed practical nursing program usually lasts for twelve months and qualifies the graduate to take an examination given by the Board of Nursing Examiners for a license to practice in Montana. It is an intensive program that includes thirty-five to forty hours a week of combined classroom instruction and supervised work experience of cooperating local hospitals.

The practical nurse programs are offered at Northern Montana College, Billings Vocational-Technical Center, Butte Vocational-Technical Center, Great Falls Vocational-Technical Center, Helena Vocational-Technical Center and Missoula Technical Center.
Miles Community College, in Miles City and Northern Montana College, in Havre, offer the associate degree nursing program which is a two-year program.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

There is a continuing demand for practical nurse. There are employment opportunities for both men and women, with the best opportunities being in the urban areas.

Most licensed practical nurses work in hospitals but there is a growing demand for L.P.N.'s to work in nursing and convalescent homes where they can free registered nurses for more technical work.

ADVANCEMENT

There is little chance for advancement without additional training.

MORE ABOUT THE JOB:

In hospitals licensed practical nurses provide much of the bedside care needed by patients such as:

-Taking and recording temperatures and blood pressure;
-Changing dressings;
-Administering certain prescribed medicines;
-Bathing bed patients and helping them with personal hygiene;
-Assisting physicians and registered nurses in examining patients and in carrying out complex nursing procedures;
-Giving medicine in nursing homes.

Other hospital duties include:

-Assisting in the delivery, care and feeding of infants;
-Helping registered nurses in recovery rooms;
-Some licensed practical nurses help in the supervision of hospital attendants.

Employed in private home, licensed practical nurses care mainly for patients whose day to day care seldom involves highly technical procedures or complicated equipment.

In doctor's offices and clinics, licensed practical nurses help physicians by preparing patients for examinations and treatment. They also make appointments and record information about patients.

JOB CLUSTER #8
"Health"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	35-40	$4.60-$5.75/hr		$4.60/hr

Salaries vary throughout the state and the nation. Some employers offer extra pay for work between the hours of 3 p.m. and 7 a.m. This pay ranges from $10 a month to $25. You may wish to check a local source for salary information in your area.

HOURS OF WORK

While most L.P.N.'s work a forty-hour week, the hours can be at any time of day or night. Weekends are considered normal workdays and even holidays are often difficult to get off, although extra pay may be offered then.

FRINGE BENEFITS

Depending upon length and place of employment, you may receive:

-Overtime pay
-Paid vacation
-Retirement plan
-Health insurance

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Employment Security Division
Box 1728
Helena, Montana 59601

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

National Association for Practical Nurse Education & Services, Inc.
122 East 42nd Street, Suite 800
New York, NY 10017

National Federation of LPN's Incorporated
250 West 57th Street
New York, NY 10019

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Nurse Anesthetist	075.371-010
Physical Therapist	076.121-014
Dental Hygienist	078.361-010
Medical Assistant	079.367-010

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: LINE MAINTAINER

LINE MAINTAINERS with both the electric power and communication industries are responsible for the installation and maintenance of poles which carry power and telephone messages to homes and businesses.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Responsible	Numerical	Good general health
Good judgement	No fear of height	Agility
Careful work habits		Eye-hand coordination
		Good color vision
		Full use of arms, hands, feet, and legs

YOU SHOULD KNOW THAT

- -Hazards connected with the line maintainer's work include falls and electric shocks;
- -Those who are not capable of performing physically strenuous work requiring full use of all the limbs as well as those who are color blind or afraid of heights should not consider a career as a line maintainer;
- -You may be required to take a pole climbing test before being hired.

YOU MUST BE ABLE TO

- -Work above ground on poles which rise more than fifty feet in the air;
- -Work in all kinds of weather, especially in emergency situations;
- -Climb, stoop, bend, and stretch in the performance of daily duties;
- -Use good judgement in selecting tools and techniques for solving problems;
- -Work underground on power lines.

DOT 821.261-014

PREPARATION AND TRAINING:

The line maintainer must have a high school education or its equivalent. They must be able to learn new techniques and concepts to keep up with technological changes.

RECOMMENDED HIGH SCHOOL COURSES

Math
Physics
English
All shop courses with emphasis on electricity

ADDITIONAL FACTS ABOUT TRAINING

Military training in line maintenance work is excellent qualifying experience. There is an apprentice program that will give you on-the-job training plus classroom work in job skills and safety regulations.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities for line maintainers exist in the light and power and the telephone industries in all areas of Montana.

Long range opportunities are not expected to be good because of continuing automation and use of long life equipment which does not require much maintenance.

ADVANCEMENT

Advancement for a line maintainer is best for those in the communications industry.

Line maintainers may become trouble shooters, installers, supervisors, repairpersons, or they may stay in a line maintainer's work advancing to difficult jobs with better pay.

Line maintainers usually transfer into other jobs by the time they are fifty years old because of the strenuous working conditions.

MORE ABOUT THE JOB:

Line maintainers will be expected to:

-Install poles above the ground;
-Maintain poles on a regular basis;
-Do repair work on poles in emergencies;
-Observe strict safety rules;
-Work outdoors in all types of weather.

Some line maintainers specialize in performing certain duties such as "hot lines" or work with high voltage lines.

All line maintainers must have knowledge of:

-Blueprint reading;
-Elementary electrical theory;
-Electrical codes;
-Methods of transmitting electrical currents.

All line maintainers must be proficient in first aid techniques and receive regular training in that skill.

All line maintainers must also know how to use standard hand tools such as pliers, screwdrivers, cutters, and others.

JOB CLUSTER #3
"Communications and Media"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$9.01/hour		

Because of varying rates of pay throughout Montana, specific information on salaries may be obtained at your nearby employment office.

HOURS OF WORK

The normal workweek consists of forty hours. Overtime is not unusual, especially during emergencies caused by weather and accidents.

FRINGE BENEFITS
Depending on place of employment, you may receive the following:

retirement plan
group insurance
paid sick leave
health and welfare plans
paid vacations
premium pay for overtime and hazardous assignment

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

The personnel manager in the telephone company or power company will be able to provide you with further information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Communications Workers of America
1925 K Street Northwest
Washington, D.C. 20006

Alliance of Independent Telephone Unions
Room 302, 1422 Chestnut Street
Philadelphia, PA 10102

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Voltage tester	821.381-014
Power transformer repairer	821.361-034
Electric meter tester	821.381-010

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: LITHOGRAPHIC PRESS OPERATOR (D.O.T. - OFFSET-PRESS OPERATOR)

The LITHOGRAPHIC OPERATOR or OFFSET-PRESS OPERATOR is the skilled craftworker who sets up and operates an offset printing press to reproduce copy for lithographic plates.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Adaptable	Mechanical	Good general health
Patient	Numerical	Good physical strength and stamina
Attention to detail	Clerical	Normal eye-hand coordination
		Full use of hands and fingers
		Normal sight and hearing

YOU SHOULD KNOW THAT

-To become a fully qualified offset operator you must complete an apprenticeship;
-Most lithographic operators are union members;
-Fully qualified lithographic operators are in demand.

YOU MUST BE ABLE TO

-Rely on your own judgement in making regular decisions affecting the quality of your work;
-Work alone most of the time, yet be able to coordinate activities with others;
-Lift up to 100 pounds;
-Work in noisy, though thoroughly clean and well lighted surroundings;
-Follow written and oral instructions.

D.O.T. 651.482-010

PREPARATION AND TRAINING:

The Lithographic Operator should have a high school education or its equivalent. They may serve an apprenticeship period or train on the job. Initial employment is found easiest by those completing some college or trade school course in lithographic press-work or a related field.

RECOMMENDED HIGH SCHOOL COURSES:

graphic arts	chemistry
English	physics
mathematics	mechanical drawing

POST HIGH SCHOOL TRAINING:

Any program in offset press work, printing and graphic arts, and related areas is recommended.

ADDITIONAL FACTS ABOUT TRAINING:

Training in press work and related areas is available in armed forces. Operator learners who complete some college work in the field often receive credit for six to eighteen months of apprenticeship work experience in addition to better than average chance at original employment.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities exist with offset printing firms, large businesses, and certain governmental agencies, including the military.

Opportunities are on the increase, although some automation has slowed their growth.

Employment is stable year round.

There is not a large demand for lithographic operators in the state of Montana.

OPPORTUNITIES FOR ADVANCEMENT

Apprentice and helpers advance to journeyman status over several years.

Journeymen who show leadership may advance to such positions as shop foreman, general superintendent, estimator, and production manager.

MORE ABOUT THE JOB:

To become a fully qualified offset operator you must complete an apprenticeship program. Apprenticeship training includes on-the-job training plus classroom work in such phases as operation and adjustment of presses, inks, and other related topics.

Lithograph Operators set up and operate the various types of presses used in the process of lithographic or offset printing. They operate a great variety of machines differing in size and capability. Certain duties, however, are standard.

The operator:

- -Examines printing orders to determine such variables as press time needed, quantity, and specifications for copy;
- -Washes and otherwise prepares plates;
- -Maintains supplies of inks and presses at all times;
- -Performs numerous adjustments to movable machine parts such as cylinders for thickness of paper used in each job;
- -Adjusts controls for proper ink flow;
- -Operates the press producing the complete run;
- -Cleans the press following each job.

JOB CLUSTER #3
"Communication and Media"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$10.01-$10.40/hr		$10.01/hr

Salaries may vary throughout the state. Check a local newspaper for current salary information in your area.

HOURS OF WORK

The normal workweek is forty hours. Overtime and night work are not unusual.

FRINGE BENEFITS
Depending on length and place of employment, you may receive:

- medical insurance
- life insurance
- retirement plan
- paid vacation
- paid holidays

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs.
You may contact a youth representative at your local Employment Service Office

Employment Security Division
Box 1728
Helena, Montana 59601

ADDITIONAL SOURCES OF INFORMATION:

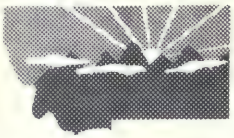
Your school counselor and librarian may also help you find additional information

International Printing Pressmen and Assistants Union of North America
Pressman's Home, Tennessee 37850

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Cylinder Operator (print. and pub.)	651.362-010
Flexigraphic Operator	651.682-010
Striping Machine Operator	652.682-026
Rotogravure Operator (print. and pub.)	651.362-026

D.O.T. Fourth Edition, page 568



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: LOCKSMITH

LOCKSMITHS install, maintain, and repair a variety of locks commonly used in offices, industrial plants, and other large companies.

A LOCKSMITH is a skilled craftsperson. Todays locks are operated by dials, push-buttons and electric circuits as well as by the traditional key. Locksmithing has become an important trade and locksmith's skill and integrity has become vital to national security.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Dependable	Mechanical	Good health
Honest	Numerical	Excellent vision
Patient	Clerical	Agility
Preference for concrete activity	Finger dexterity	Full use of hands
		Eye-hand coordination
		Good physical stamina

YOU SHOULD KNOW THAT

- -You should have a preference for working with your hands and machines;
- -You should be able to use good judgement in planning out operations and choosing tools.

YOU MUST BE ABLE TO

- -Use math to figure dimensions and ratios;
- -Do work which requires constant attention with rapidity and accuracy;
- -Communicate effectively with the public since it means the difference between a contract or not;
- -Stay in one position for long periods of time on precision jobs.

D.O.T. 709.281-010

PREPARATION AND TRAINING:

High school graduation is not always required, but candidates who have completed an education will be given preference over those who have not. Some college or trade and technical schooling is preferred. Some employers require their employees to have related job experience.

RECOMMENDED HIGH SCHOOL COURSES:

- Mechanics
- Metal Shop
- Wood Shop
- Drafting
- English
- Speech
- Math

COURSES AFTER HIGH SCHOOL:

- Sales
- Small Business Management
- Math
- Machine Shop
- Supervision
- Mechanics
- Drafting
- Physics
- Blueprint Reading
- Properties of Materials

ADDITIONAL FACTS ABOUT TRAINING:

Employers give the necessary training in all phases of the trade, including the history of locksmithing, the purpose of training apprenticeships, technical and trade terms, trade ethics, and practices and procedures.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Many locksmiths are self-employed.

Others work for safe and lock companies.

Some find employment in large industrial firms, school districts, hospitals, and government installations.

Opportunities are generally best in the more populated area.

Job opportunities for the lock expert, the person who has taken the time and trouble to prepare themselves for this vocation, are good.

ADVANCEMENT

Opportunities for advancement are limited.

MORE ABOUT THE JOB:

Locksmiths open locks for which there are no keys, make original and master keys, change lock combinations by inserting new tumblers, and change key locks to make existing keys useless.

Locksmiths disassemble locks such as padlocks, safe locks, and door locks and repair or replace worn tumblers, springs, and other parts. They shorten tumblers using a file and insert new or repair tumblers into the lock to change the combination. New or duplicate keys are cut using key-cutting machine. The lock pick is removed in the cylinder to open door locks without keys. Safe locks are opened by turning the dials and listening to sounds of tumblers or by drilling through the lock.

Locksmiths also may install and repair burglar alarm systems. The installation of compact alarm systems in residences is increasingly in demand. If a locksmith lives in a manufacturing area, he/she may devote much of his/her time to master keying and maintenance work. If the shop is in a residential district, the locksmith may specialize in security systems for the home by doing all the lockwork and by maintaining a retail and service outlet for some other product.

JOB CLUSTER #11
"Marketing and Distribution"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40-48	$200-$300/wk	$250-$295/wk	$200/wk

Earnings of self-employed locksmiths vary from $9,000 to $40,000 a year.

HOURS OF WORK

From forty-four to sixty hours a week is often demanded for locksmiths who are self-employed. Apprentices usually work forty-four hours a week and the industrial or institutional locksmith works about forty hours weekly with some overtime.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

- sick leave
- paid vacation
- paid holidays
- health insurance
- life insurance

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Employment Security Division
P.O. Box 1728
Helena, Montana 59601

ADDITIONAL SOURCES OF INFORMATION:

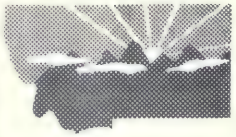
Your school counselor and librarian may also help you find additional information

Montana State Apprenticeship Council
1336 Helena Avenue
Helena, Montana 59601

Associated Locksmiths of America, Inc.
3003 Live Oak Street
Dallas, Texas 75204

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Tool-and-Die Maker	601.280-046
Inspector, Typewriter Assembly and Parts	706.381-022
Instrument Repairer	710.261-010



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: LUMBER GRADER

LUMBER GRADERS examine milled or rough sawed lumber and sort it according to designated standards. The grader is designated by the type of lumber graded, such as dry lumber grader, green lumber grader, green chain grader, planer grader, and shipping grader.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Efficient	Numerical	Good general health
Reliable	Some clerical	Good vision and hearing (natural or corrected)
Good judgment	Spatial	Good color vision
Attention to details		

YOU SHOULD KNOW THAT

If you have asthma or hayfever, you should not consider this job.
You may have to join a union since a good deal of the sawmills are organized.
In the past women were seldom hired as lumber graders, but that field is now open to them.

YOU MUST BE ABLE TO

-stand, stoop, and walk continuously throughout the day
-visualize defects, color differences, and all variations in quality of materials
-adapt to routine and often repetitious situations
-work in all kinds of conditions including heat, cold, rain, dust, indoors or out.

DOT 669.587-010

PREPARATION AND TRAINING:

There is no minimum formal educational requirement for entry into this occupation. Some employers prefer their employees to have at least a high school graduation. You should be aware that those applicants who have completed their education have the best chance for employment.

RECOMMENDED HIGH SCHOOL SUBJECTS:

-English
-Speech
-Typing
-Math
-Physics
-Wood Shop

COURSE OF STUDY AFTER HIGH SCHOOL:

-Introductory Forestry
-Forest Technology
-Nature Study
-Biology
-Botany
-Math

ADDITIONAL FACTS ABOUT TRAINING:

Training is generally received on-the-job. Some employers want their employees to be certified, and this takes from six months to two to three years. Entry into the job also requires from three to five years of sawmill experience. Once a year, there is a week long grading conference held at which time new grading techniques are discussed.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Skilled lumber graders are in great demand during the peak season.
The best time for seeking work is April through November.
Certified or partly certified workers usually do not have any trouble in finding work.
Most employers try to keep them employed all year round.
Sawmills are found in the western part of the state and that is the best location for seeking work.

ADVANCEMENT

In addition to becoming a certified grader, the lumber grader has many chances for promotion. The alert individual who can demonstrate qualities of leadership can work up to mill supervisor, yard supervisor, mill superintendent or shipping superintendent.

MORE ABOUT THE JOB:

The lumber grader occupation may include the duties listed below:

-examining lumber as it passes on a conveyer for such defects as splits, knots, stains, worm holes, and unsatisfactory milling
-using a turning rule (a ruled wooden stick with a hook at one end) to turn the lumber for inspection
-rotating faulty pieces of lumber to be reworked or to the disposal bin
-marking each board with a grade as determined by the absence of such blemishes as worm holes, knots, or off coloring
-making sure that each board that passes is up to the standards established by the industry
-measuring the thickness and width of boards using caliper rules to insure specific dimensions
-making tallies of lumber pieces and board footage and keep written reports on all this information.

Some workers in supervisory positions may keep check or review the work of the other graders and be designated check grader.

Graders are grouped into several classes. The certified grader must have approval of the Western Pine Association as an official pine grader. The fir grader has the sanction of the West Coast Lumberman's Association and is provided with the "fir stamp" with which he stamps fir lumber graded according to standards.

JOB CLUSTER #10

"Manufacturing"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$175-275/wk	$175-235/wk	$175-185/wk

Because of varying rates of pay, check an on-site source for specific salary information.

HOURS OF WORK

The normal workweek is forty hours, Monday through Friday with time and a half for overtime. During the peak season, mills may work forty-eight hours a week or more with a full eight-hour day on Saturday.

FRINGE BENEFITS
Depending on length and place of employment, you may receive:

-paid vacation
-paid holiday
-paid overtime
-retirement plan
-health insurance
-life insurance

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

The personnel manager of a lumber mill may be able to provide further information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

International Woodworkers of America
1622 N. Lombard Street
Portland, Oregon 97217

RELATED OCCUPATIONS:

JOB TITLE:	D.O.T.#:
Veneer Grader (veneer & plywood)	669.587-010

D.O.T. Fourth Edition, page 589

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: MACHINIST

The journeyman or all-around MACHINIST carries through to completion the construction or repair metal parts, tools and machines from written specifications such as blueprints, engineering sketches, or dimensions.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Dependable	Concentration	Good vision (natural or corrected)
Patient	Mechanical	Normal physical strength and stamina
Must like exacting work	Clerical	Eye-hand coordination
Pride in work	Numerical	
	Manual dexterity	

YOU SHOULD KNOW THAT

The best way to get started in this trade is to apply for an apprenticeship opening.
Apprenticeship training generally lasts four years.
You will be exposed to dust, noise, grease, falling metal, flying metal chips, and moving machinery.

YOU MUST BE ABLE TO

-use eyes on close work for prolonged periods
-read blueprints
-layout and plan a job from beginning to end
-organize your work
-use and read micrometers and other measuring instruments
-stand for long periods of time

D.O.T. 600.280-022

PREPARATION AND TRAINING:

You are expected to have a high school and/or vocational background. Many employers are interested in the applicant's academic record. Some employers feel that an academic background is more important than a vocational background.

RECOMMENDED HIGH SCHOOL COURSES:

Mathematics	Shop
Physics	Mechanical Drawing

ADDITIONAL FACTS ABOUT TRAINING

Employers will require that you go through a rigorous apprenticeship program consisting of on-the-job training and classroom work. Some companies may require employees to take courses at no cost to the employer.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

The number of all-around machinists needed is expected to increase. Much of the employment growth will occur in the maintenance shops of manufacturing plants as industries continue to use a greater volume of complex machinery and equipment.

The apprentice machinist can advance to journeyman machinist and/or to supervisor of a section.

With additional training he/she may become tool and die maker or instrument maker.

He/she may become skilled in other technical jobs in process planning, machine programming, and tooling.

MORE ABOUT THE JOB:

The principle job of most machinists is to operate machine tools. A machine tool is a stationary power-driven machine that holds firmly both the piece of metal to be shaped and a cutting instrument or tool and brings them together so that the metal is cut to the desired shape. The most common types of machine tools are:

laths	grinding machines	drilling and boring machines
milling machines	shapers	broachers and planers

Several new metal shaping techniques have been introduced in recent years. Metal can now be shaped using:

chemicals	electricity	magnetism
sound	light	liquids

Accuracy is of prime importance for most metal machinery work. Motors, farm machinery, and typewriters are some of the wide variety of products made of separate metal parts that must be made to precise dimensions. Metal parts are sometimes machined to tolerances of ten-millionths of an inch.

JOB CLUSTER #10

"Manufacturing"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40-48	$8.00-$12.00/hr.	$10.00/hr.	$8.00/hr.

Because of varying rates of pay throughout Montana, specific information on salaries may be obtained at your nearby employment office.

HOURS OF WORK

Forty to forty-eight hours per week. You may be asked to work overtime.

FRINGE BENEFITS

Depending on place and length of employment you may receive the following:

-paid vacations & holidays	-medical and surgical insurance
-life insurance	-retirement plans
-sickness and accident insurance	-hospitalization

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Employment Security Division
Box 1728
Helena, Montana 59601

ADDITIONAL SOURCES OF INFORMATION:

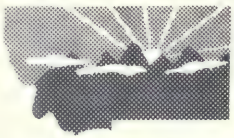
Your school counselor and librarian may also help you find additional information

International Association of Machinists and Aerospace Workers
1300 Connecticut Avenue Northwest
Washington, D.C. 20036

International Union of Electrical Radio and Machine Workers
1126 - 16th St. NW
Washington, D.C. 20036

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Maintenance Machinist	600.280-042
Pattern Maker (Metal)	600.280-050
Instrument Maker (any ind.)	600.280-010



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: MAIL CARRIER

The MAIL CARRIER is responsible for delivering and collecting the mail in a specific area to which he/she is assigned.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Mature	Verbal	Good general health
Responsible	Some clerical	Eye-hand coordination
Dependable	Some numerical	Able to stand for long periods
Good memory	Finger dexterity	Normal vision (natural or corrected)
Pleasant manner		Able to lift up to 35 pounds
Neat appearance		
Conscientious		

YOU SHOULD KNOW THAT

-There is no minimum educational requirement, but graduates hoping to advance to better positions will benefit from high school and some college training;
-You must take a civil service examination administered regularly;
-Most offices provide full-time summer employment for high school and college youths.

YOU MUST BE ABLE TO

-Tolerate making deliveries on rainy days or extremely warm days;
-Prepare receipts, receive charges, and keep records of all transactions;
-Lift relatively heavy (35 pounds) objects, usually bundles of mail;
-A government driver's license is also required. This is provided by the post office after an examination by a postal driver instructor.

DOT 230.367-010

PREPARATION AND TRAINING:

A high school education is a minimum if the applicant is under eighteen years of age. Otherwise, there is no minimum educational requirement. However, applicants hoping to advance to better positions are advised to have at least a high school education and some college training.

RECOMMENDED HIGH SCHOOL COURSES:

English
Mathematics
Business Administration

COURSES AFTER HIGH SCHOOL:

English
Business Administration
Business Organization
Cost Accounting
Bookkeeping
Office Management
Human Relations in Business
Basic Report Writing
Personnel Management

ADDITIONAL FACTS ABOUT TRAINING

For the candidate hoping to advance, training in business management and administration will be invaluable. The Post Office is basically a large business and each branch station is a small business operation. Upon employment, you will receive some supervised training on-the-job.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities are good for both men and women.

Opportunities are good for well qualified individuals.

Veterans receive hiring preference.

The competitive examination insures equality of opportunity.

ADVANCEMENT

Advancement for most carriers is in the form of guaranteed wage increases and preferred routes which come with seniority.

You will be eligible with five years seniority to take a competitive test for a supervisory position.

MORE ABOUT THE JOB:

The mail carrier begins the day by arranging or sorting the mail into proper delivery order. This usually takes several hours at the post office.

The carrier signs for special mail such as registered mail and C.O.D. letters.

Because the total weight of the mail for a day is too heavy to carry at one time, it is tied up in bundles called "relays." Each carrier is responsible to load and transport their route mail.

Carriers in suburban areas deliver the mail from light, three-wheeled motor vehicles. In rural areas, cars and trucks are used. In the cities, delivery is made on foot.

Another group of carriers collect mail by truck from post boxes throughout the city. These may work until 10 or 12 at night. Still others deliver post and special delivery mail, also by truck.

All carriers must be able to answer questions from the public regarding postal regulations and provide change-of-address cards and other postal forms when required.

JOB CLUSTER #14
"Public Services"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$14,603 to $17,168/year		

Check with your local post office for GSA salary schedule.

HOURS OF WORK

The mail carrier works an eight-hour day five days a week. He/she may alternate days off and some weeks work Saturday. Overtime work is common, especially during holiday seasons.

FRINGE BENEFITS

- Retirement plan
- Medical plan
- Life insurance
- Paid holidays
- Two to four weeks paid vacation
- Sick leave

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Your local postmaster may be able to provide further information.

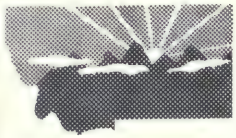
ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

American Society of Public Administration
1329 18th Street Northwest
Washington, D.C. 20036

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Radio-message router	235.387-010
Bank Messenger	230.367-014
Rural Mail-Carrier	230.363-010
Route Clerk	235.562-010



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: MAINTENANCE MECHANIC

The MAINTENANCE MECHANIC repairs, maintains, and dismantles or partially dismantles machines and other equipment, repairs and replaces parts, and re-assembles equipment in industrial and manufacturing firms.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Responsible	Mechanical	Good eyesight (natural or corrected)
Good judgement	Mathematical	Physical stamina
Like to work alone	Manual dexterity	Agility
Accurate		Average or above strength
		Full use of hands

YOU SHOULD KNOW THAT

-The complexity of new plant equipment places more demand upon skilled mechanics;
-The trend is toward an increasing use of complicated machines; this may require constant retraining.

YOU MUST BE ABLE TO

-Lift, stoop, crawl under and climb over machinery;
-Squirm into small places;
-Tolerate noises of humming machines and clatter of equipment;
-Put in long hours walking, standing, lifting and stooping;
-Assume large responsibility and follow through on a job.

DOT 638.281-014

PREPARATION AND TRAINING:

A high school diploma is considered an advantage. There is no formal training for maintenance mechanics. The trade can be learned from on-the-job training with experienced maintenance mechanics. Ability to work with tools, understand functions of machinery, and willingness to work are the primary qualifications to obtain a job as a trainee.

RECOMMENDED HIGH SCHOOL COURSES

Shop classes	Mathematics
Mechanical Drawing	Applied Physical Science

After demonstrating workmanship, dependability, reliability, integrity, and willingness to work and learn, you can apply for an opening as an oiler or greaser when the company has the need during peak periods of work.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities exist in all types of industrial, food processing, and aircraft plants as well as in hospitals.

The projected opportunities in Montana indicate that for the years 1980 to 1990 there will not be any increase in the need for maintenance mechanics throughout the state.

ADVANCEMENT

The maintenance mechanic can advance to supervisor or superintendent with the possibility of becoming a plant engineer.

MORE ABOUT THE JOB:

Maintenance mechanics' main responsibility is to keep machinery operating. Failure to do so results in costly breakdowns stopping production of the company. They dismantle machinery to repair or replace parts and re-assemble equipment. They provide constant surveillance of equipment, make minor repairs, and oil and grease machinery to prevent breakdowns. The maintenance mechanic may also fabricate and install new equipment and re-arrange machinery.

The maintenance mechanic's job is sometimes classified into four brackets:

IV - An oiler or greaser who does periodic lubrication, checks operation, replaces broken fittings, makes minor adjustments, reports trouble to supervisor.

III - An assistant maintenance mechanic who assists as needed, adjusts or repairs simpler types of machinery, and oils and greases as necessary.

II - An assistant to Bracket I. Maintenance Mechanic who helps build and install machinery and equipment; constructs minor equipment; maintains, repairs, and overhauls moderately complex machinery.

I - Maintenance Mechanic with full responsibility under the supervisor or superintendent for the building, installation, efficient operation, maintenance, repair, and overhaul of major machinery and equipment. They are also able to layout work from sketches and drawings and may supervise and instruct others assigned to them.

JOB CLUSTER #9
"Manufacturing"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	40	$8.00-$10.00/hr	$8.25/hr	$8.00/hr

Salaries may vary throughout the state.

HOURS OF WORK
The normal workweek is forty hours. Some industries such as food canning have seasonal peaks requiring overtime at time and one-half up to twelve hours, double time after twelve hours.

FRINGE BENEFITS
Depending on length and place of employment, you may receive:

- health insurance
- paid holidays
- paid vacations
- accident insurance
- unemployment insurance

VV10579

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Write to: State Consultant, Trade and Industrial Education
Office of Public Instruction
State Capitol
Helena, Montana 59601

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Instrument Society of America
530 William Penn Place
Pittsburgh, Pennsylvania 15200

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Millwright	638.281-018
Coin Machine Service Repairer	639.281-014
Office Machines Servicer	633.281-018
Pump Servicer	630.281-018

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MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: MAINTENANCE REPAIRER

MAINTENANCE REPAIRERS are employed in factories and office buildings as well as in many other settings. They are primarily responsible for the maintenance of physical structures and equipment. They use hand and power tools in the job.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Good judgement	Mechanical	Good general health
Pride in work	Electrical	Strong back
Concern for safety	Numerical	Good vision and hearing (natural or corrected)
Willing to work in dirty areas		Good color perception

YOU SHOULD KNOW THAT

- -The maintenance repairer is expected to be a jack-of-all trades adept at making minor repairs and adjustments on many kinds of equipment and buildings;
- -Your best chance of getting this type of work is to get some summer or part-time work in welding, painting, building, and related fields. Even then competition will be stiff because many construction trades workers look to this type of employment because the work is steady.

YOU MUST BE ABLE TO

- -Work with hand and power tools;
- -Understand basic electronic circuitry and be able to apply this knowledge to the maintenance and repair of electric motors and heating and cooling units;
- -Be familiar with small job repair materials and application.

DOT 899.381-010

PREPARATION AND TRAINING:

A high school diploma or G.E.D. certificate is important. If you want to compete with older experienced construction workers, some college training with emphasis on electronics, refrigeration, air-conditioning, and welding is advised.

RECOMMENDED HIGH SCHOOL SUBJECTS

Metal Shop	Welding	Electricity
Drafting	Business Math	Wood Shop

English (The ability to read well is always desired since you will trouble shoot broken equipment using technical manuals.)

COURSE OF STUDY AFTER HIGH SCHOOL

The course of study after high school should be in the trades and technical area. These courses include welding, machine shop, motor rewinding, carpentry, plumbing, and drafting.

ADDITIONAL FACTS ABOUT TRAINING

Some firms with only one or two building maintenance repairers expect workers with plenty of experience. The only way you can compete for this kind of job is to get many kinds of part-time and summer jobs in different areas of construction and maintenance as possible. On-the-job training may be provided, but it is usually brief.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Most jobs exist for workers who are already skilled in one or more phases of building construction or maintenance.

The best chance for a young person is to break-in with a large firm which employs both building maintenance repairers and helpers.

Opportunities exist mainly in larger metropolitan areas.

Opportunities are increasing slowly throughout the state.

ADVANCEMENT

Promotional opportunities are limited to possible advancement to maintenance supervisor should the employer need several maintenance repairers.

MORE ABOUT THE JOB:

Maintenance repairers who may work alone in a small place or as part of a team in a larger operation help keep their area or building operational. Some tasks which the maintenance repairer typically performs are:

-Replaces defective electric switches, sockets, and plugs;
-Replaces corroded and exposed pipes;
-Paints structures and equipment;
-Replaces worn floorboards and broken railings;
-Mends furniture;
-Repairs door hinges, locks, and knobs;
-Fixes broken windows;
-Repairs plaster;
-Repairs bathroom fixtures.

Much of the work of the maintenance repairer is preventive in nature. A good deal of time is spent making regular inspections of equipment so that worn parts can be replaced before breakdowns occur.

Building maintenance repairers are responsible for keeping the environment of office and industrial buildings pleasant.

JOB CLUSTER #9
"Manufacturing"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	40	$7.74-$8.20/hr	$7.90/hr	$7.74/hr

Salaries may vary throughout the state.

HOURS OF WORK
Hours of work are likely to be regular with a 7:30 to 4:00 or 8:00 to 5:00 shift Monday through Friday. However, you are likely to be on call in an emergency. Some plants which operate twenty-four hours a day may have building maintenance repairers working night and graveyard shifts.

FRINGE BENEFITS
Depending on length and place of employment, you may receive:

paid vacation
paid overtime
sick leave
retirement plan
profit sharing
employee discounts

VV10579

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs.
You may contact a youth representative at your local Employment Service Office.

Employment Security Division
Box 1728
Helena, Montana 59601

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information.

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
House Repairer (const.)	869.381-010
Plumber, Maintenance (any ind.)	862.381-030
Steam Service Repairer (light, heat, power)	862.361-022
Maintenance Repairer, Sewer and Water Works	862.381-018
Furnace Repairer (light, heat, power)	862.361-010

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MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: MAKE-UP ARRANGER

The MAKE-UP ARRANGER assembles newspaper stories and advertisements into page form. They make sure all type and pictures are in the correct spots on the page before sending it to the final steps in printing.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Accurate	Numerical	Good general health
Precise	Clerical	Above average coordination
Attention to detail	Artistic dexterity	Able to lift heavy objects
Like working with machines		

YOU SHOULD KNOW THAT

-newspaper printing shops may seem disorganized, but it is the job of the make-up arranger to bring order to apparent chaos
-you won't like this job if you are bothered by noise or pressure
-in many cases, you will be hired as an apprentice and be required to join a union.

YOU MUST BE ABLE TO

-work under pressure of printing deadlines
-stay on your feet for long periods of time
-work both under direct orders of make-up supervisors and independently of them when pressure deadlines must be met.

DOT 973.381-026

PREPARATION AND TRAINING:

There is no formal minimum level of schooling. However, most companies prefer high school graduates. Credit is usually given for completion of some college courses in printing.

RECOMMENDED HIGH SCHOOL SUBJECTS:

-English
-Graphic Arts
-Chemistry
-Physics
-Photography
-Industrial Arts

COURSE OF STUDY AFTER HIGH SCHOOL:

If a major in graphic arts is offered, it should be taken. Employers will honor some college training with a higher starting salary and most union apprenticeship programs take completion of graphic arts courses into account.

ADDITIONAL FACTS ABOUT TRAINING:

Many newspaper make-up arrangers get their training on small daily or weekly newspapers where there is no formal apprenticeship program. After gaining experience, they move to larger newspapers.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

The projected opportunities in Montana indicate that for the years 1979-1985 there will not be much need for make-up arrangers.
Because of increasing automation of some phases of newspaper backshop production and the switch of some newspapers to offset printing methods, the overall employment outlook is not as good as that in some other fields.
The student who is interested in the future would do well to prepare for possible technological changes by studying about offset printing and should be prepared to at some point in his/her career, undertake retraining in line with technological advances.

ADVANCEMENT

Some printers who start in the newspaper business establish their own private commercial printing plants. In a newspaper backshop, the journeyman printer may advance to assistant foreman or foreman and in some cases to production supervisor.

MORE ABOUT THE JOB:

After news or advertising copy has been written by reporters or ad salespeople, edited and set into type by tape perforations or linotype operators, make-up arrangers put the metal type into pages and get them ready for the stereotypers and press people.

The first step in page make-up is handled by ad make-up people. They assemble both hand and machine set type into a form the size and design of which are indicated by the adviser. The following equipment may be used:

-power metal saw
-snips
-pica stick (printer's rule)
-leads and slugs (spacing material)
-column rules (borders)
-type casting machine.

When the advertisement is assembled in proper form according to the layout sheet, it is stored temporarily. Then it is designated to a certain page in the newspaper and placed in a page form or chase. The page make-up arranger then takes over. Into the chases the news stories and pictures are placed as designed on dummies sent down from the editorial department.

The make-up arranger must be able to cut stories which are too long to fit into the designated space or find fillers when the stories are too short.

A clip and paste method is used with offset equipment.

JOB CLUSTER #3

"Communication and Media"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
35-40	$165-300/wk	$200-250/wk	$165-190/wk

The above salaries are based on journeyman scales; however, may vary throughout the state. Trainees, either with an apprenticeship program or on-the-job, usually are paid a percentage of a journeyman's wage with increases at set periods of their training.

HOURS OF WORK

The workweek is varied from 35 to 48 hours. On newspapers which print more than five days a week, the employee may expect to work Saturdays and have only an occasional weekend off. Large papers may have night crews and morning crews.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

-thirty-five-hour workweek
-paid overtime
-vacation pay
-sick leave
-health insurance
-life insurance
-retirement program
-low cost meals
-shift differentials

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

The personnel manager of a local newspaper may be able to provide further information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

International Typographical Union
P. O. Box 157
Colorado Springs, Colorado 80901

Printing Industries of America, Inc.
1730 North Lynn Street
Arlington, Virginia 22209

RELATED OCCUPATIONS:

JOB TITLE:	D.O.T.#:
Compositor (print. & pub.)	973.381-010
Imposer (print. & pub.)	152.067-014
Job-Printer (print. & pub.)	973.381-018

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MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: MEAT CUTTER

The MEAT CUTTER practices the trade in retail markets, wholesale establishments, and frozen food locker plants. This includes preparing displays and packaging meat, poultry and fish.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Adaptable	Mechanical	Good eye-hand coordination
Dependable	Numerical	Able to lift heavy objects
Clean	Spatial	Normal health
Good Grooming		Good vision and hearing (nautal or corrected)
		Good color vision

YOU SHOULD KNOW THAT

-The hazards of this job include possible injuries while using power and hand equipment and strains from heavy lifting;
-You may be required to join a union.

YOU MUST BE ABLE TO

-Carry heavy sections of meat from overhead racks to cutting table;
-Handle sharp tools, including saws, knives, and meat grinders;
-Divide halves or quarters of beef into saleable packages with a minimum of waste.

D.O.T 316.684-018

PREPARATION AND TRAINING:

The worker who has completed high school stands a better chance of getting and holding a job.

RECOMMENDED HIGH SCHOOL SUBJECTS

Shop courses will familiarize you with some of the basic kinds of tools and equipment so you will be better prepared to operate meat cutting equipment. Business math and English are important tools.

COORSE OF STUDY AFTER HIGH SCHOOL

An applicant for apprentice meat cutter should apply directly to employers and when one is located who is willing to employ and train them, apply to a union apprenticeship committee for approval. The committee, which is composed of both union and employer members, approves a trainee, the employer, and the training program.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

There is a moderate demand for meat cutter apprentices which should increase with population growth. However, opportunities in Montana are still limited.

Opportunities are expected to remain the same for several years.

Meat cutters are found in cities of all sizes and are employed by retail grocery stores, meat markets, and frozen food lockers.

ADVANCEMENT

Upon completion of the apprenticeship program, the meat cutter becomes a journeyman.

MORE ABOUT THE JOB:

Retail meat cutters must be able to deal with and serve customers directly. The work is steady the year round with heavy periods before holidays.

Typical job duties of the retail meat cutter include:

- -Breaking halves and quarters of carcasses into basic cuts of meat, such as chucks, ribs, and rounds;
- -Cutting the basic cuts into smaller sizes for sale to retail customers;
- -Boning and typing roasts and other meats;
- -Preparing meats for wrapping;
- -Placing meats on display counters for sale;
- -Answering questions and filling specific orders for customers;
- -May handle money and make change for customers;
- -May advise customers on proper preparation techniques.

Meat cutters use a number of tools in the trade. Some of these are: grinders, cubing machines, power saws, knives, cleavers, stitching needles and sharpening steel.

JOB CLUSTER #12
"Personal Services"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$8.32/hr		

Salaries may vary throughout the state. Check your local union or employment service for accurate information for your area. You may wish to check their apprenticeship program.

HOURS OF WORK
The standard workweek is forty to forty-eight hours. This may include weekends with days off during the week. Overtime is not common.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

insurance plan	health insurance
paid vacation	medical insurance
retirement plan	

VV10579

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Employment Security Division
Box 1728
Helena, Montana 59601

ADDITIONAL SOURCES OF INFORMATION:

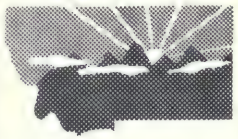
Your school counselor and librarian may also help you find additional information

Amalgamated Meat Cutters and Butcher Workmen of North America
2800 North Sheridan Road
Chicago, Illinois 60657

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Deli-cutter slicer	316.684-014
Butcher, chicken and fish	316.684-010
Baker helper	313.684-010
Carver	316.661-010

D.O.T. Fourth Edition, page 229



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: MEDICAL ASSISTANT

MEDICAL ASSISTANTS do routine tasks to help physicians examine and treat patients. They may have to do routine laboratory tests for the physician and may remain during the examination. The ASSISTANT may have to take the patient's temperature, measure weight and height, and check blood pressure.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Friendly and pleasant	Scientific	Eye-hand coordination
Precise	Clerical	Good Health
Neat in appearance	Finger dexterity	Free from communicable disease
Good memory	Verbal	Good vision (natural or corrected)
Quick and alert		
Patient		
Hold strict confidences		

YOU SHOULD KNOW THAT

-The job of a medical assistant (sometimes called a medical secretary) has been recognized as a distinct vocation for which special training is necessary.
-Poise, discretion, tact, and good judgment are essential for the medical assistant.

YOU MUST BE ABLE TO

-Assist the physician.
-Also serve as a combination receptionist, laboratory assistant, telephone operator, credit manager, nurse, bookkeeper, and diplomat.

DOT 079.367-010

PREPARATION AND TRAINING:

High school graduation is a minimal requirement for the medical assistant for entry into this field; without further education and special training, employment is becoming more difficult.

In high school, a student interested in becoming a medical assistant should get as much training in office skills as possible--shorthand, filing, typing, office machines, and they should be proficient in English grammar, spelling and punctuation. Other pertinent high school courses should include the sciences such as biology, chemistry, physilogy and hygiene.

A high school graduate with this office training and technical scientific knowledge can get started in this field immediately.

SPECIAL ENTRY REQUIREMENTS

A medical assistant must pass a physical examination and be free from communicable diseases. The American Association of Medical Assistants offers two certification examinations for medical assistant; these are given once a year and are open to high school graduates with certain minimum experience as medical assistants.

PROSPECTS AND OPPORTUNITIES:

JOB AVAILABILITY TRENDS

The need for medical assistants is great.
Physicians in current practice as well as all kinds of health organizations will need more qualified medical assistants.
More and better health programs such as Medicare will create openings for medical assistants.
The largest number of positions is in the larger cities and medical centers.

ADVANCEMENTS

Opportunities for advancement may include moving to a larger medical practice or remaining with the same one and receiving increases in salary.

MORE ABOUT THE JOB:

JOB RESPONSIBILITIES

-greeting patients as they arrive
-handling physician's correspondence
-filing patients' histories
-sterilizing equipment
-disposing of soiled linen
-preparing patients for examination
-taking laboratory tests
-applying surgical dressing
-administering injections
-filling out various forms.

JOB CLUSTER #8
"Health"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$9,400-$16,900/yr	$13,900/yr	$9,400/yr

HOURS OF WORK

The forty-hour workweek is standard. Hours, however, may vary depending on place of employment.

FRINGE BENEFITS

Depending on place and length of employment, you may receive the following:

-hospitalization plan
-sick pay
-paid vacation
-paid holidays
-if in a hospital, low cost meals

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

American Association of Medical Assistants
1 East Wacker Dr., Suite 1510
Chicago, IL 60610

American Medical Association Council on Medical Education
535 North Dearborn Street
Chicago, IL 60610

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Respiratory Therapist	079.361-010
Dental Assistant	079.371-010
Emergency Medical Tech.	079.374-010
Nurse - LPN	079.374-014

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MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: MEDICAL LABORATORY TECHNICIAN

MEDICAL LABORATORY TECHNICIANS plan an important role in helping physicians treat patients by conducting laboratory tests, under appropriate supervision, that aid in the diagnosis and detection of such diseases as cancer, diabetes and tuberculosis. In large laboratories, they may concentrate in one of several areas--clinical chemistry, blood banking, bacteriology, parasitology, serology, performing tests for blood counts or other duties.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Interest in science	Manual	Full use of hands, fingers and arms
Attentive to detail	Verbal	Good physical and mental health
Perform well under emergency	Clerical	See and hear well
Accurate	Scientific	Non-allergenic skin
Have integrity		Good eye-hand coordination
		Good sense of smell

YOU SHOULD KNOW THAT

-You won't qualify if:
you have an active communicable disease (T.B., V.D.);
you have a physical condition that would affect job performance (i.e., epilepsy);
you have a police record (particularly undesirable; anything to do with narcotics);
you do not meet hospital standards of cleanliness and grooming.

YOU MUST BE ABLE TO: -Sit at close work for long periods of time;
-Stand or walk for extended periods at other times;
-Use eyes for close work, sometimes microscopic work, for long periods;
-Perform repetitive tasks on continuous basis without becoming careless--a patient's life may depend on the accuracy of your tests;
-Observe hygenic precautions for working with infectious materials;
-Ignore unpleaseant odors.

D.O.T. 078.381-014

PREPARATION AND TRAINING:

Minimum educational requirement is graduation from high school and two years of college preparation followed by on the job training period and successful passage of examination administered by the American Society of Clinical Pathologists (ASCP).

COURSE OF STUDY INCLUDES:

Laboratory mathematics	Zoology	Clinical Chemistry
Health education	Botany	Bacteriology
Microbiology	Biology	Professional ethics
Physics		

PROSPECTS AND OPPORTUNITIES:

JOB AVAILABILITY TRENDS

Employment opportunities for medical laboratory technicians are expected to be good. There will be openings in hospitals, laboratories, public health agencies, pharmaceutical firms, research institutions and physicians' offices across the country.

ADVANCEMENT

Unfortunately, there is little chance for advancement without further educational training.

MORE ABOUT THE JOB:

A medical laboratory technician works under the supervision of a licensed medical technologist or a physician performing one or more routine laboratory tests in bacteriology, hematology, parasitology, blood banking, or urinalysis and doing related work as needed. In a large laboratory, the medical laboratory technician may make only one type of test. In a small one, the technician may perform all types.

Special duties might include:

-Performing urinalysis;
-Making blood cell counts;
-Making blood type tests;
-Separating blood plasma for storage;
-Preparing sterile media for bacteria cultures;
-Collecting specimens from patients;
-Keeping necessary records;
-Making preliminary identification of bacteria for confirmation by technologists;
-Cleaning and sterilizing equipment, glassware and instruments;
-Preparing solutions, reagents and stains;
-Maintaining laboratory stock of chemicals and glassware.

In addition, working in a doctor's office or clinic might require answering telephones in relieving the receptionist.

JOB CLUSTER #8
"Health"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$3.50-$4.50/hr	$3.60-$3.75/hr	$3.50/hr

Salaries may vary throughout the state. You may wish to check a local source for information in your area.

HOURS OF WORK

Technicians usually work a forty-hour week. They may have weekend and holiday work, may be asked to work evenings and may also be on emergency call.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

paid vacation	health insurance
retirement benefits	sick leave
Social Security	paid holidays

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

The Montana State Department of Public Health may be able to provide further information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

American Society for Medical Technology
Suite 25, Herman Professional Building
5555 West Loop South
Bellaire, TX 77401

American Association of Medical Assistants (AAMA)
535 North Dearborn
Chicago, IL 60610

American Society of Clinical Pathologists
Box 4872
Chicago, IL 60680

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
EEG Technician	078.367-022
EKG Technician	078.362-018
Radiologic Technologist (X-Ray)	078.362-026
Occupational Therapist	076.121-010
Medical Technologist	078.361-014

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: MEDICAL RECORD ADMINISTRATOR

A key member of the modern medical team, the MEDICAL RECORD ADMINISTRATOR is responsibile for assembling medical information and making it available when it is needed.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Accurate	Intelligent	Normal vision and hearing (natural or corrected)
Discreet	Verbal	Normal use of hands
Tactful	Numerical	Average health
Good memory	Clerical	
Cooperative	Organizational	
Good judgement		
Initiative		

YOU SHOULD KNOW THAT

You cannot qualify if:

-you have a police record for a criminal offense;
-you have a communicable disease.

YOU MUST BE ABLE TO

-Withstand stress and frequent interruptions and maintain a high degree of accuracy.
-Secure the cooperation of others and supervise others.
-Work with little or no supervision.
-Be pleasant and courteous at all times.

DOT 079.167-014

PREPARATION AND TRAINING:

The requirement for becoming a registered medical record administrator is four years of college training from an approved school for medical record administrators majoring in medical record library science followed by passing the registration examination.

Training schools are approved by the American Medical Association.

It is possible to enter the field through two years of post high school training given in designated schools for medical record technicians. This training will enable the person to become an accredited medical record technician upon passing the technician examination.

Both examinations, registered medical record administrator and an accredited medical record technician, are given by the American Medical Record Association in designated places once a year. Consult your counselor for this information.

RECOMMENDED HIGH SCHOOL COURSES:
-English
-biology
-college preparatory courses

ADDITIONAL FACTS ABOUT TRAINING

There is a trend toward higher education requirements for nearly all jobs. The setting of minimum wages at a subsistence level from the first day of employment makes it necessary for employers to get employees who are worth their wages in work produced. Individuals interested in this work should obtain as much training as possible.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITIES AND DISTRIBUTION

The majority of medical record administrators are employed in hospitals. Other possible places of employment include medical departments of industrial organizations commercial insurance companies, health departments, medical research centers, nursing homes, medical associations, and health departments of country and state governments.

OPPORTUNITIES FOR ADVANCEMENT

There are opportunities to work as consultant for several hospitals, particularly in rural areas.

MORE ABOUT THE JOB:

The Medical Record Administrator:

-directs activities of the medical record department;
-cooperates with the medical staff in research projects;
-may be asked to care for professional reference books and journals;
-supervises medical record technicians in department;
-codes and indexes;
-may abstract data from records for insurance purposes;
-confers with medical staff to set standards for records;
-plans system to maintain standard records;
-prepares vital statistics and mortality reports;
-releases information to authorized people;
-represents hospital in court in medical-legal matters.

JOB CLUSTER #2
"Business & Office"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	$14,500-$18,000 annually		

Because of varying rates of pay throughout Montana, specific information on salaries may be obtained at your nearby employment office.

HOURS OF WORK

The forty-hour week is standard. There may be some evening, weekend and holiday work.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

-retirement plan
-sick leave
-paid holidays
-health insurance
-paid vacation

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Contact the personnel director of your local hospital.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

American Medical Record Association
875 North Michigan Avenue, Suite 1850
Chicago, IL 60611

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Respiratory Therapist	079.361-010
Medical Assistant	079.367-010
Dental Assistant	079.371-010
Emergency Medical Technician	079.374-010
Nurse, L.P.N.	079.374-014

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MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: MEDICAL RECORDS CLERK

MEDICAL RECORDS CLERKS classify medical records of patients and prepare statistical reports. They preserve medical information on computers or microfilm and maintain files. The Medical Records Clerk provides information to the medical staff on request.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Accurate	Numerical	Average health
Dependable	Clerical	Free from communicable disease
Precise	Technical	Normal vision and hearing (natural or corrected)
Neat appearance	Verbal	
Able to work with people		
Accept responsibility		

YOU SHOULD KNOW THAT

-All information is to be held in strict confidence and not discussed with friends.
-You may be asked to operate certain machines and equipment such as photocopy equipment, scanner, and adding machines.

YOU MUST BE ABLE TO

-Type at a minimum speed of forty words per minute;
-understand medical terminology commonly used on charts and records;
-check records for deficiencies for charting, such as signatures, dates and proper entries;
-store, maintain, and retrieve records from files.

DOT 245.362-010

PREPARATION AND TRAINING:

High school graduation is almost always required. While some post secondary training is not required, you will increase your opportunity for employment if you complete a business school or some college training.

RECOMMENDED HIGH SCHOOL SUBJECTS:

Business Math	Typing	Word Clues
Business Machines	Filing	
Clerical Practice	Bookkeeping	

COURSE OF STUDY AFTER HIGH SCHOOL:

Typing	Records Management	Office Procedures
Data Processing	Medical Terminology	Bookkeeping
Business Correspondence	Duplicating Machines	

Technical training in the field, from a technical school, or a correspondence course offered by the American Association of Medical Record Librarians are best. Non-technical hospital records libraries offer some employment.

PROSPECTS AND OPPORTUNITIES:

JOB AVAILABILITY TRENDS

Since more women work in this area, replacement needs may remain high as they leave the field for marriage and family responsibilities.

Employment opportunities exist in hospitals, clinics, medical research centers, medical departments of insurance companies and industrial firms, local and state health departments.

ADVANCEMENT

Most hospitals seem to have three levels of positions--junior, intermediate, and senior.

With experience, it is possible to move from one level to the next.

MORE ABOUT THE JOB:

Medical records clerks are responsible for the processing, storage, and retrieving of medical records. They may assist the medical staff in research projects.

The medical record clerk:

- -takes part in activities of the medical record department;
- -cooperates with medical staff in research projects;
- -may prepare statistical reports from records;
- -may be asked to care for professional reference books and journals;
- -works under the supervision of a medical record administrator;
- -may abstract data from records for insurance purposes;
- -confers with medical staff to set standards for records;
- -prepares vital statistics and morality reports;
- -codes and indexes material;
- -releases information to authorized persons.

JOB CLUSTER #2
"Business & Office"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	40	$602-$940/mo	$725/mo	$602/mo

Salaries may vary according to experience and length of time on the job.

HOURS OF WORK

Hours of work are likely to be quite regular; however, as the workload in a particular city increases, there may be more than one shift.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

- -paid vacation
- -retirement plan
- -life insurance
- -health insurance
- -sick leave
- -overtime pay

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Contact the personnel director of a local hospital.

ADDITIONAL SOURCES OF INFORMATION:

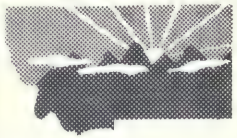
Your school counselor and librarian may also help you find additional information

Council on Medical Education
American Medical Association
535 North Dearborn Avenue
Chicago, Illinois 60610

The American Association of Medical Record Librarians
211 East Chicago Avenue
Chicago, Illinois 60611

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Ward Clerk	219.388-286
Diet Clerk	245.587-010



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: MEDICAL TECHNOLOGIST (MT)

The MEDICAL TECHNOLOGIST is licensed to perform chemical, microscopic, and bacteriological tests under the general direction of a clinical pathologist, licensed bioanalyst, or M.D. for use in the treatment and diagnosis of various diseases.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Dependable	Scientific	Good general health
Alert	Verbal	Normal vision
Thorough	Numerical	Color perception
Precise	Intelligence	Eye-hand coordination
Pride in work	Some Clerical	Free of communicable
Desire for perfection	Finger dexterity	disease

YOU SHOULD KNOW THAT

-Graduation from college is the minimum educational requirement.
-You won't qualify if you have a communicable disease, have a police record, or do not meet hospital standards of cleanliness and grooming.

YOU MUST BE ABLE TO

-Do precise and accurate work under pressure;
-work standing, sitting, bending, or stooping;
-use eyes for close work, often using microscopes for long periods;
-ignore unpleasant odors and endure the sight of blood;
-always remember that a patient's life may be dependent upon the accuracy and thoroughness of your tests.

DOT 078.361-014

PREPARATION AND TRAINING:

The minimum educational requirement is completion of a four-year college or university course, followed by 12 months internship in an approved school of medical technology and successful passage of registery examination.

RECOMMENDED HIGH SCHOOL COURSES:

English	Algebra
Chemistry	Geometry
Physics	Trigonometry
Biology	

COURSES AFTER HIGH SCHOOL:

Anatomy	Physics	Bacteriology
Microbiology	Clinical Chemistry	Physiology
Biology	Laboratory Mathematics	Advanced Algebra
Botany		

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITIES

Opportunities are good for both men and women.
Qualified medical technologists are in demand and have a variety of employment opportunities available.

OPPORTUNITIES FOR ADVANCEMENT

With additional experience, training and licensing the medical technologist can become:

-chief medical technologist;
-research technologist;
-bioanalyst.

MORE ABOUT THE JOB:

Medical technologists may be employed by a hospital or a doctor's office. They must pass a state examination and have a college degree and one year of training.

The medical technologist performs such tasks as:

-performing blood tests of all types;
-making compatibility tests of donors and recipients;
-cultivating, isolating, and identifying bacteria, parasites and other organisms;
-preparing vaccines and serums;
-cutting and mounting tissue sections for study;
-making electrocardiograms to study the functioning of the head;
-making electroencephalograms to study impulses in the brain;
-instructing student medical technologists;
-making urinalysis;
-making basic metabolism tests;
-setting up various equipment used on the job;
-operating equipment to measure glandular and bodily activity.

The medical technologist must always remember that the accuracy, preciseness and thoroughness of the tests may make the difference between the life or death of a patient.

JOB CLUSTER #8
"Health"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$6.50-$8.00/hr		$6.50/hr

Because of varying rates of pay throughout Montana, specific information on salaries may be obtained at your nearby employment office or hospital.

HOURS OF WORK

The medical technologist usually works a standard eight-hour shift five days a week. Some overtime work may be required during emergencies on weekends and holidays.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

-medical care
-life insurance
-retirement benefits
-Social Security
-sick leave
-Paid vacations and holidays

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Contact the personnel director of your local hospital.

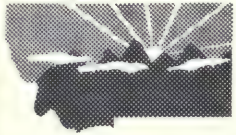
ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

American Medical Technologists
710 Higgins Road
Park Ridge, IL 60068

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Nuclear medical technologist	078.361-018
Histologic technician	141.061-026



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: MESSENGER or OUTSIDE DELIVERER

A MESSENGER is employed, full or part-time, by a large business. MESSENGERS may be required to be able to operate a car or bicycle. The main job is to deliver messages, but they may also do some typing and clerical work.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Attentive	Clerical	Normal stamina
Dependable		Good vision & hearing (natural or corrected)
Courteous		Full use of legs and feet
Pleasant		Able to lift heavy objects

YOU SHOULD KNOW THAT

- Many messenger jobs require you to operate a motorcycle or car or both;
- Some employers hire messengers who may be promoted to better paying and more responsible jobs in the future;
- A police record, including an unusually bad record for traffic citations, can prevent you from getting a job as a messenger in many companies.

YOU MUST BE ABLE TO

- Follow written and spoken instructions carefully and accurately;
- Work for long periods of time while on your feet;
- Bend, lift, reach, and handle objects of various sizes;
- Keep simple but accurate records of deliveries made to various clients;
- Maintain a pleasant, courteous manner with customers and co-workers.

D.O.T. 230.667-010

PREPARATION AND TRAINING:

The messenger usually need not be a high school graduate. In some jobs, it is necessary. College training would be beneficial for future opportunities. The messenger will be trained on-the-job.

COURSE OF STUDY INCLUDES:

High School: Business English, arithmetic, bookkeeping, typing, and other business courses are recommended.

Post High School: No particular course is recommended. Rather, you should complete whatever subjects would enhance your promotional chances with your employer.

ADDITIONAL FACTS ABOUT TRAINING:

Part-time messenger jobs may be found, thus leaving time to attend school. Good knowledge of local geography is an asset in getting a job as a messenger.

SPECIAL ENTRY REQUIREMENTS:

Bonding is a requirement for some jobs.

A valid driver's license is necessary.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

The opportunity for obtaining employment is good. Opportunities are greatest in large cities. Large businesses and messenger services have the most jobs available.

ADVANCEMENT

The opportunities for advancement to more responsible positions and higher wages are limited.

MORE ABOUT THE JOB:

Principal duties of messengers consist of transporting messages from one location to another. Methods of transporting messages vary depending on the exact nature of a particular messenger's job.

Messengers who carry items from one building to another may drive cars or ride bicycles.

Those who work solely within one building will walk.

Messengers typically perform other duties in addition to delivering messages. These duties might include:

-Carry heavy sacks and load and unload them from trucks;
-Sort mail;
-Perform simple filing and other clerical jobs as assigned;
-May do some typing;
-May make bank deposits.

The majority of messengers of all types follow a well-defined and organized schedule which they must stick with daily.

The beginning messenger will usually be closely supervised for a short period of time until he or she learns the assigned route and duties.

JOB CLUSTER #13
"Personal Services"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	40	$125-$170/wk	$135-$150/wk	$125-$135/wk

Salaries may vary throughout the state. You may wish to consult a local employer for salary information.

HOURS OF WORK

Messengers usually work forty hours Monday through Friday. Overtime and weekend work is not usual.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

Paid vacation	Group insurance plans
Sick leave	Retirement plan
Disability benefits	Paid holidays

VV10579

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

The local office of the employment service may be able to provide further information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Office Employees International Union
1012 14th Street, N.W.
Washington, D.C. 20005

American Society of Traffic and Transportation
22 West Madison Street
Chicago, IL 60602

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
File Clerk	206.362-010
Ward Clerk	245.362-014
Tool Clerk	222.367-062
Supply Clerk	222.387-058

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: METALLURGICAL ENGINEER or METALLURGIST

The terms "METALLURGIST" and "METALLURGICAL ENGINEER" are used interchangeably. Persons working in the field of metallurgy are often referred to as "materials engineer" or "materials scientists." It is becoming popular to divide the field into two branches: (1) physical and (2) extractive. Besides working in departments engaged in production and research, METALLURGICAL ENGINEERS are engaged in writing, editing, doing patent work, teaching, selling and servicing, marketing, purchasing and administering.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Able to work as part of a team	Analytical	Good general health
Innovative	Capacity for detail	
Initiative	Ability to systematically evaluate and solve problems	
Ability to make decisions	Verbal	

YOU SHOULD KNOW THAT

- -Lately, the metallurgist has also taken up materials in the broadest sense, thus including ceramics, glass and plastics, and composites of same. Therefore, the field is an exceptionally wide one;
- -Basically, metallurgy is the application of the principles of chemistry, mathematics, and physics to the study of the properties of metals; therefore, the metallurgist must have a thorough training in these basic sciences.

YOU MUST BE ABLE TO

- -Work with others as part of a team, or work alone at times;
- -Work on problems involving the development of new metals and alloys as well as the adaption of current ones to new needs;
- -Communicate your ideas to specialists in areas such as marketing and production planning.

DOT 011.061-018 or 022

PREPARATION AND TRAINING:

High school students who plan to enter and pursue college programs in either science or engineering are strongly urged to take the maximum amount of the physical sciences, English, and college preparatory mathematics available at their particular high schools. While the lack of the suggested course work in high school will not prevent entry into college, students deficient in high school preparation must take an adjusted study college program which may extend their resident time.

Beginning engineering students may elect a four-year terminal program or a five-year terminal program. Terminal means that the student may be in resident study either four or five years in order to meet the requirements for graduation. The time required depends upon school preparation and individual needs. Statistics concerning resident time indicate that only the well-prepared student can complete an engineering curriculum in four years; even the well-prepared student may desire an enriched course of study and consequently this student may prefer a longer period in resident study.

The first college year provides an educational program of courses of instruction which is basic to all engineering career-fields. Chemistry, engineering graphics, mathematics, physics, and English are the common courses. These courses supply the foundation for the following academic program of each department and for the student-selected engineering career-field.

Because of rapidly changing technologies, engineers must be willing to continue their education.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Increasing numbers of metallurgical engineers will be needed by the metalworking industries to work on problems involving the development of new metals and alloys as well as the adaption of current ones to new needs.

Metallurgical engineers will also be needed to solve metallurgical problems connected with the efficient use of nuclear energy.

As the supply of highgrade ores diminishes, more metallurgical engineers will be needed to find ways of processing low-grade ores now regarded as unprofitable to mine.

ADVANCEMENT

Engineering graduates usually begin work as trainees or as assistants to experienced engineers.

As they gain experience, engineers may advance to positions of greater responsibility. Those with proven ability often become administrators.

Increasingly large numbers are promoted to top executive posts.

Many engineers obtain graduate degrees in business administration to improve their advancement opportunities.

MORE ABOUT THE JOB:

Metallurgists usually work in one of two main branches of metallurgy:

Extractive--involves the extraction of metals from ores and their refining to obtain pure metal.

Physical----deals with the properties of metals and their alloys, and with methods of converting refined metals into useful final products. Scientists working in this field are known as metallurgists, but the distinction between scientists and metallurgists in this field is small.

So broad are these branches, however, that there are numerous large divisions among them. For example, ferrous metallurgy deals only with iron and steel, powder metallurgy deals with metallic parts produced from metal powders, and nuclear metallurgy is concerned with the metallurgy of those metals important in the development of nuclear power. There are many other such divisions and all are characterized by overlapping into neighboring ones so that it is rather hard to draw a boundary between them.

An increasing number of metallurgists will be needed to develop a light-weight metal capable of withstanding both extremely high and extremely low temperatures for use in supersonic jet aircraft, missiles, satellites and spacecraft.

JOB CLUSTER #9
"Manufacturing"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	40-48			

Salary ranges from $16,800-$24,000 annually. The salary range depends on education and experience.

HOURS OF WORK

On a purely metallurgical job, one would probably work an 8:00 a.m. - 5:00 p.m. job, five or six days a week. If the work extended beyond metallurgy, other shifts would be common.

FRINGE BENEFITS

Depending on the length and place of employment, the metallurgist may earn:

- sick leave
- profit sharing
- retirement plan
- vacation pay
- holidays
- health and life insurance

VV10579

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Employment Security Division
P.O. Box 1728
Helena, Montana 59601

Montana College of Mineral Science and Technology
Butte, Montana 59701

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

The Metallurgical Society of the American Institute of Mining
Metallurgical and Petroleum Engineers
540 Arapeen Drive
Research Park
Salt Lake City, Utah 84108

American Society of Metals
Metals Park, Ohio 44073

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Foundry Metallurgist (found.)	011.061-010
Metallographer (profess. & kin.)	011.061-014
Welding Engineer (profess. & kin.)	011.061-026

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: METER READER

METER READERS are employed by utility companies to read meters which measure the consumption of water, gas or electricity by residents and commercial customers. They also record readings and compute consumption on forms.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Alert	Numerical	Free of back ailments
Tactful	Clerical	Good vision and hearing (natural or corrected)
Patient		Normal use of feet and legs
Mature		
Pleasant personality		

YOU SHOULD KNOW THAT

- For many meter reading jobs, you must be able to prove financial responsibility by being bonded;
- Hazards connected with meter reading are minimal, but include exposure to dogs;
- You will deal with customers as a regular part of the job, including answering many questions about service of utility companies in dealing with people who are angry.

YOU MUST BE ABLE TO

- Walk all day as a normal part of the job;
- Write legibly and make arithmetic calculations quickly and accurately;
- Pass a physical examination as a condition of employment.

DOT 209.567-010

PREPARATION AND TRAINING:

A high school education is desirable for this occupation.

Chances of obtaining employment increase with junior college training.

Many meter readers are hired from within their companies. They are recruited from employees who occupy positions at lower levels in the organization, such as laborer, custodian or other.

Although junior college attendance is not a requirement for a meter reader, it increases the general worth to an employer or potential employer and opportunities to advance within a company.

THE COURSE OF STUDY INCLUDES:

High School:

Mathematics	Shop courses
English	Public Speaking

Junior College:

Mathematics	Classes in the Liberal Arts

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities are best for workers already employed by utility companies.

Openings occur due to promotion and retirements.

ADVANCEMENT

Some meter readers advance to supervisory positions, but this is a rather remote possibility without unusual individual initiative.

MORE ABOUT THE JOB:

The Meter Reader is employed by the commercial department of a municipal or privately owned utility. He/she reads the meters that measure the consumption of water, gas or electricity by residential, commercial and industrial customers and records the readings on customer account forms and computes the amount of consumption by subtracting the previous reading from the current one.

The Meter Reader usually follows prescribed routes. Customer account forms also known as read sheets and meter cards, are assembled into loose-leaf binders so that the top sheet represents the first meter on the route, the second sheet is for the second meter, and so on.

In urban areas the Meter Reader covers the route on foot. In rural areas and industrial sections made up of large plants he/she drives a vehicle from location to location, for example, he/she reads meters for each service at every stop.

The Meter Reader must be able to meet customers pleasantly and answer routine questions.

Most meter routes are designed to be covered in approximately six hours under ordinary conditions. The Meter Reader uses the rest of the eight hour day traveling between the office and the route, bringing the meter book up to date, reporting on the day's work and preparing work for the following day.

JOB CLUSTER #14
"Public Services"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$160-$230/wk	$170-$200/wk	$160-$190/wk

Salaries may vary throughout the state. Check a local source for accurate salary information for your area.

HOURS OF WORK

The normal work week is forty hours. Overtime is required. Some night work is required of a few employees.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

- sick leave
- disability benefits
- paid holidays
- retirement plan
- group health and life insurance plans
- paid vacation

VV10579

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

The personnel director of the local utility company can provide you with further information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information.

Utility Workers of America
1875 Connecticut Ave. N.W.
Washington, D.C. 20006

International Brotherhood Electrical Workers
1125 15th Street, N.W.
Washington, D.C. 20005

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Routing Clerk	209.567-018
Map Clerk	209.567-030

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: MILKER

MILKERS are employed on dairy farms to operate milking machine equipment which extract the milk from a dairy herd.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Dependable	Mechanical	Average health
Like animals	Numerical	Physical stamina
Like outdoors	Some clerical	Able to lift and carry 50 pounds
Adaptable		

YOU SHOULD KNOW THAT

-milkers must work two shifts--early morning and late afternoon
-milkers must work with only a few days off each month
-hazards include slipping on wet floors and being kicked by cows
-you probably will have to pass a physical examination and the TB checks.

YOU MUST BE ABLE TO

-adjust living conditions and family life to split shift hours
-operate milking machine equipment
-recognize certain ailments such as mastitis and other cattle diseases
-adapt to a series of relatively routine tasks
-work under various temperatures and weather conditions

DOT 410.685-010

PREPARATION AND TRAINING:

There is no formal educational requirement. Employers usually want a worker to be qualified or experienced. This experience may be gained from a farm background or through school agricultural programs.

RECOMMENDED HIGH SCHOOL SUBJECTS:

High school agricultural and shop mechanics classes may be beneficial when job openings arise.

COURSE OF STUDY AFTER HIGH SCHOOL

As a rule, the milker starts as an outside or chore person, learning to be a completely trustworthy and reliable employee. The worker may then become a substitute milker and pick up sufficient skill to be regarded as experienced.

SPECIAL ENTRY REQUIREMENTS

Employers usually require that milkers be non-drinkers because of the stress placed upon dependability in this occupation.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

The predicted opportunities in Montana are that there will be little or no increase in total job openings.

ADVANCEMENT

The worker who is ambitious and able will have a variety of chances to advance. The milker in a large dairy may progress to head milker or to foreman.

MORE ABOUT THE JOB:

A milker's duties vary with the size of the farm that employs him/her. His/her tasks vary to a degree also between Grade A and Grade B dairies.

In large dairies, the milker usually milks a string of from 90 to 125 cows by machine with pipeline delivery. He/she will normally wash the machines and equipment and will usually be responsible for the health of his/her string. Almost never will he/she be required to do outside chores or field work.

The milker in the medium sized dairy, in addition to milking, usually washes down the cows in preparation for milking, feeds the string being milked, keeps records, washes the milking barn, and washes and sterilizes milking equipment. The milker also does some of the outside chores such as calf feeding and barn cleanup.

There are numerous variations in the milker's job when he/she is employed in a small dairy. However, his/her most important job is to do the milking twice a day. In addition, he/she usually does cleanup chores around the dairy and ordinarily spends several hours in related field work.

Regardless of the size or type of dairy where he/she is employed, the milker must be aware of the characteristics and the condition of the cows in his/her string. He/she must know how long to leave the milking machine on individual animals and when they may need special care.

JOB CLUSTER #1

AGRIBUSINESS AND NATURAL RESOURCES

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	40-55	$550-750/mo.	$600-650/mo.	$550/mo.

The salary figures given above do not take into account that milkers usually receive a rent free house and all utilities paid plus free milk.

HOURS OF WORK

A work day of eight to ten hours divided into an early morning shift and an afternoon shift is the most common arrangement. Practices vary regarding days off. Some employees work every day of the year while others may have days off each week.

FRINGE BENEFITS

Depending on length and place of employment, you may get:

-health insurance
-free housing and utilities
-paid vacation
-if single, room and board

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

A local dairy may be able to provide further information.

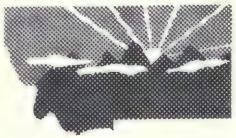
ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

U. S. Department of Agriculture
Washington, D.C. 20250

RELATED OCCUPATIONS:

JOB TITLE:	D.O.T.#:
Animal Farming	410.161-010
Poultry Farming	411.161-018



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: MILLWRIGHT

MILLWRIGHT is a highly skilled worker employed in many factory industries. He/she installs, dismantles, and moves heavy machinery or supervises such operations

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Initiative	Mechanical	Good health
Adaptable	Numerical	Above average agility
Dependable	Clerical	Good vision and hearing (natural or corrected)
Accurate	Spatial	Normal or better eye-hand coordination
Attention to detail		

YOU SHOULD KNOW THAT

- -Hazards include falling from high places, falling machinery and equipment, strains, cuts and bruises;
- -Millwrights are usually members of a labor union.

YOU MUST BE ABLE TO

- -Analyze difficult shop problems requiring knowledge of many craft techniques, plan solutions, and carry them through to completion;
- -Perform heavy physical labor;
- -Work well as part of a team in the process of moving and installing machinery;
- -Work above ground at times from ladders, catwalks, and scaffolding.

D.O.T. 638.281-010

PREPARATION AND TRAINING:

The millwright trains as a formal apprentice over four years or informally as much as ten years.

COURSE OF STUDY INCLUDES:

High School: Courses in science, mathematics, mechanical drawing, and shop, especially machine, are good preparation.

Formal apprenticeship: Includes shop training and setting up, dismantling, moving, and repairing machinery, carpentry, welding, uses of concrete and structural steel, classroom training in shop mathematics, hydraulics, safety, and blueprint reading.

Informal training: Varies widely and includes training in several crafts over a period of years.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

The projected opportunities in Montana indicate that the years 1980-90 are good.

Opportunities are best in the individualized areas.

ADVANCEMENT

Millwrights employed by installation contractors can advance to positions as job supervisors and job superintendents.

Those employed as maintenance millwrights can become plant supervisors and/or plant superintendents.

MORE ABOUT THE JOB:

Millwrights work in a wide variety of industries. They move, install, and sometimes maintain heavy equipment and machinery. Millwrights must be versatile and qualified to work in several crafts. In performing their work, millwrights use a great deal of equipment. They use such things as: hoists, cranes, jacks, crowbars, plumb bobs, wood blocking, rigging devices, wrenches, screwdrivers, calipers, pliers, hammers, welding tools, micrometers and squares and levels.

Assembly of industrial equipment requires such processes as: fitting bearings, aligning gears, aligning wheels, attaching motors, connecting belts, woodworking, making concrete foundations, constructing platforms, and metal working.

Some millwrights work as part of a maintenance team repairing and maintaining equipment.

They work from scaffolding or on ground doing the following: fixing or replacing broken belts, welding metal parts, oiling and greasing machinery and equipment and checking equipment for preventive maintenance needs.

JOB CLUSTER #4
"Construction"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$10.46/hr	Journeymen Scale	

Salaries may vary throughout the state. Check a local union or employment agency for accurate salary information in your area. Also, you may wish to check on apprenticeship programs.

HOURS OF WORK

The normal work week is forty hours Monday through Friday. Overtime is not common.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

- paid vacation
- sick leave
- retirement plan
- paid holidays
- group insurance
- premium paid for overtime and night work

VV10579

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

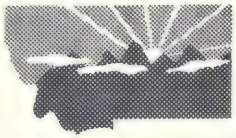
ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

United Brotherhood of Carpenters and Joiners of America
101 Constitution Avenue N.W.
Washington, D.C. 20001

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Automated Equipment Engineer-Technician (mach. mfg.)	638.261-010
Maintenance Mechanic	638.281-014
Parts Salvager	638.281-026



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: MINING ENGINEER

The MINING ENGINEER is charged with the duties of designing systems of people, machines, and techniques for the efficient, profitable, and safe extraction of minerals from the earth.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Able to work as part of a team	Analytical	Good general health
Innovative	Capacity for detail	
Initiative	Ability to systematically evaluate and solve problems	
Ability to make decisions	Verbal	

YOU SHOULD KNOW THAT

- -The mining engineer's education must have its roots in the art of mining as developed through time and experience, as well as in the world of science which provides a continual stream of new knowledge of nature;
- -Students gain valuable experience through employment in mines;
- -Mining engineers frequently specialize in the extraction of specific metal ores or coal and other nonmetallic minerals.

YOU MUST BE ABLE TO

- -Be responsible for the efficient operation of mines and mine safety, including ventilation, water supply, power, communications, and maintenance of equipment;
- -Perform important functions in the areas of: mine planning, computer knowledge, materials handling systems, equipment selection analysis, surveying (mine and land), ore sampling and assaying.

DOT 010.061-014

PREPARATION AND TRAINING:

High school students who plan to enter college in either the field of science or engineering are strongly urged to take the maximum amount of the physical sciences, English and college preparatory mathematics available at their high school. While the lack of the suggested course work in high school will not prevent entry into college, students deficient in high school preparation must take an adjusted study college program which may extend their resident time. The quality of the applicant's high school work is emphasized.

Beginning engineering students may elect a four-year terminal program or a five-year terminal program. Terminal means that the student may be in resident study either four or five years in order to meet the requirements for graduation. The time required depends upon school preparation and individual needs. Statistics concerning resident time indicate that only the well-prepared student can complete an engineering curriculum in four years; even the well-prepared student may desire an enriched course of study and consequently this student may prefer a longer period in resident study.

The first college year provides an educational program of courses of instruction which is basic to all engineering career-fields. Chemistry, engineering graphics, mathematics, physics and English are the common courses. These courses supply the foundation for the following academic program of each department and for the student-selected engineering career-field.

Because of rapidly changing technologies, engineers must be willing to continue their education throughout their career.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Easily mined deposits are being depleted, creating a growing need for engineers to mine newly discovered mineral deposits and to devise more efficient methods for mining low-grade ores.

Additional employment opportunities for mining engineers will arise as new alloys and new uses for metals increase the demand for less widely used ores.

Recovery of metals from the seas and the development of recently discovered oil shale deposits could present major challenges to the mining engineer.

Anaconda's Butte operations will continue at least at present rates and may expand significantly, thus providing excellent opportunity to the mining engineer. Coal in Montana is a significant attribute and should provide future technical employment.

ADVANCEMENT

Mining engineering graduates frequently start in first-level supervisory positions. Then, providing they perform satisfactorily, will advance into more advanced supervisory and administrative positions.

MORE ABOUT THE JOB:

Mineral resources are characterized by one unique fact that makes them different from the rest of the world's raw material supplies--once extracted they are never replenished. Thus, the mining industry is confronted with a continually changing situation because it must search for new sources of mineral-product supply farther afield and deeper within the earth, and it is also forced to utilize continually lower grade ore.

Mining engineers find and extract minerals from the earth and prepare minerals for use by manufacturing industries. They design the layouts of mines (underground or surface), supervise the construction of mine shafts and tunnels in underground operations, and devise methods of transporting extracted minerals to processing plants. Mining engineers are responsible for the efficient operation of mines and mine safety, including ventilation, water supply, power, communications, and maintenance of equipment. Some mining engineers work with geologists and metallurgical engineers to locate and appraise new ore deposits. Others develop new mining equipment and devise improved methods to process extracted minerals. Mine planning, computer knowledge, materials handling systems, equipment selection analysis, surveying (mines and land), ore sampling and assaying are important functions.

Mining engineers may specialize in a specific mining method--more so than a specific mineral. Examples: open pit mining, underground mining (of which there are numerous specialties), strip mining, placer mining, etc.).

JOB CLUSTER #1
"Agri-Business and Natural Resources"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40-48	$16,800-$24,000/yr	$18,700/yr	$16,800/yr

HOURS OF WORK
The engineer seeking a supervisory position with intended advancement into management will work a three shift basis. Engineering department duties will be a straight day shift. (Anaconda Company, Butte)

FRINGE BENEFITS
Depending on length and place of employment, the mining engineer may earn:

- sick leave
- vacation pay
- holidays
- savings plans
- profit sharing
- health and life insurance
- retirement plan
- annual merit salary increases

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Employment Security Division
P.O. Box 1728
Helena, Montana 59601

Montana College of Mineral Science and Technology
Butte, Montana 59701

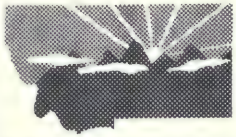
ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

The Society of Mining Engineers of the American Institute of Mining Metallurgical and Petroleum Engineers
345 East 47th Street
New York, New York 10017

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Petroleum Engineer (petrol. production)	010.061-018
Safety Engineer, Mines (profess. & kin.)	010-061-026
Chief Engineer, Research	010.161-010



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: MODEL

MODELS pose for artists and photographers, model clothing in showrooms and fashion shows, and in some cases, display and demonstrate merchandise at trade shows and on TV.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Poise	Verbal	Normal good health
Enthusiasm		Excellent body carriage
Self-confidence		Average or better stamina and endurance
Pleasing appearance		A slim figure
Good personal hygiene		Normal eye-hand coordination
Patient		

YOU SHOULD KNOW THAT

-Jobs as full time regular models are sought after and competition is great;
-Many more models work part time than work full time;
-In addition to the models in the apparel industry, many are employed in television and magazine work;
-Small numbers of additional workers are artists' models.

YOU MUST BE ABLE TO

-Convince people of the value of the style or product modeled;
-Work odd and long hours when necessary;
-Perform in front of audiences by yourself.

DOT 297.667-014

PREPARATION AND TRAINING:

Models should have at least a high school diploma. They usually need special training at a modeling or charm school.

COURSE OF STUDY

High School: Recommended courses include English, speech and dramatic arts.

Charm School: Includes such subjects as poise, etiquette, natural make-up, social graces, weight control, hair styling, speech and diction.

College: Courses in speech, drama, sales, and dancing are good preparation.

ADDITIONAL FACTS ABOUT TRAINING

Students who are interested and feel they have modeling potential can sometimes gain experience and insight into modeling as teen models for large department stores in their localities. Regardless of the amount of preparation you have in this highly competitive field, few succeed in becoming top models.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities are few in total number and are not expected to increase greatly.

Opportunities in Montana are limited.

ADVANCEMENT

For most full time models, advancement comes in the form of better paying and more desirable modeling jobs.

Some models use their jobs as stepping stones to positions as fashion consultants with magazines, large department stores and apparel manufacturers.

MORE ABOUT THE JOB:

The majority of models are primarily engaged in the job of wearing and demonstrating apparel of all types. They may be employed in retail or wholesale clothing stores, large department stores, or for themselves. Models may also be employed by clothing manufacturers.

Typical duties vary depending on the type of employer and include:

-Serving as the framework for styling and fitting in the production process;
-Actual apparel modeling for retail and wholesale buyers;
-Discussing the clothes modeled with all types of buyers;
-Tasks such as secretarial work;
-Selling, inspecting garments, serving as host/hostess at shows, and other duties assigned when not actually modeling.

Free lance models who work through agencies as well as by direct application may perform some or all of the above duties as well as:

-Illustration work, which includes posing for fashion photographers on short assignments;
-Working in demonstration and sales booths in department stores, at fairs, and in other kinds of exhibits;
-Acting in television commercials and other presentations.

A small group of models pose for artists on a free lance basis. The primary duty of the artist's model is to hold a pose for a long period of time while projecting the kind of mood or feeling the artist desires.

JOB CLUSTER #7
"Fine Arts & Humanities"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
Fashion models working full time for manufacturers or wholesalers, generally earned around $20,000 a year in 1978.	40			

Photographic models earn more, often as much as $100/hour.

Models working for major agencies in New York City earned from $30,000-$50,000 a year.

HOURS OF WORK

Hours vary from 35 to 40 for regularly employed models. Models may work part time or during busy seasons. Overtime is rare.

FRINGE BENEFITS

Full time department store or manufacturer's models may receive:

paid vacation	retirement plan
paid holidays	discount or free clothing
group insurance	hair styling

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Mac Gil, Gillis
Your Future in Modeling
New York, New York

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Double	961.364-010
Stand-by (mot. pic.)	358.677-010
Demonstrator	297.354-010
Exhibit-Display Representative	297.367-010

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: MOTION PICTURE PROJECTIONIST

A MOTION PICTURE PROJECTIONIST works from an elevated room at the back of the theatre and operates projection machines and audio equipment assuring high quality screen and sound presentation for the audience, or projects from floor level and uses mirrors to eleveate the picture.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Dependable	Mechanical	Eye-hand-finger coordination
Punctual	Intellectual	Good health
Alert	Spatial	Average physical strength and endurance
Adaptable		Good eyesight and hearing (natural or corrected)
Initiative		Normal use of arms, hands, legs, and feet
Accurate		

YOU SHOULD KNOW THAT

- -The time an individual needs to become a projectionist depends on his/her abilities to learn and take orders from an experienced person;
- -An apprentice learns the trade by working full or part-time with an experienced projectionist;
- -He/she may work in several theatres to become familiar with different types of equipment.

YOU MUST BE ABLE TO

- -Adjust and repair projection equipment;
- -Work rapidly to re-thread film so that the show may run continuously;
- -Clean and lubricate and check for defective parts and damaged film and make minor repairs and adjustments;
- -Work quickly and accurately alone in close quarters.

DOT 960.362-010

PREPARATION AND TRAINING:

Most motion picture theatres are unionized, and young people who wish to work as motion picture projectionists in these theatres must complete a period of apprenticeship. The length of time a person must serve as an apprentice before taking an examination for union membership may vary from one to two years depending on the policies of the local unions. If an apprentice is capable of performing the work, he/she is assigned to a full or part-time job at journeyman's pay before becoming a member.

Practical experience gained from operating movies projectors at home, at school, or in the armed services is also helpful.

RECOMMENDED HIGH SCHOOL SUBJECTS:

Electricity
Electronics
Sciences

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Prospects are rated poor in the state of Montana.

More than three-fourths of the projectionists are employed in indoor theatres; the remainder are employed in drive-in theatres.

Projectionists work in cities and towns of all sizes.

Some projectionists work for large manufacturers, television studios, and federal, state, and local governments.

OPPORTUNITIES FOR ADVANCEMENT

In a non-union theatre, a young person may start as an usher or helper and learn the trade by working with an experienced projectionist.

Many small theatres have a manager-projectionist combination and larger towns are starting the same procedure.

MORE ABOUT THE JOB:

The motion picture projectionist:

- -Shows a full-length movie, using two projectors, audio equipment, a film rewinding machine and seven reels or more of film (new installations use one projector and the film is spliced on a large table continuous up to 4½ hours);
- -Loads the projector by re-threading the film through a series of sprockets and guide rollers and attaching it to a take-up reel;
- -Ignites and adjusts carbon rods that furnish the light for the screen (many theatres now use 2000W and larger bulbs);
- -Starts the projector containing the first reel and when proper running speed has been obtained, operates the shutter and a picture appears on the screen;
- -Makes necessary adjustment on projector to bring into focus a steady picture on the screen;
- -Watches for cue marks (small circles in the upper right hand corner of the screen) which indicate that it is time to start the second projector; when a second series of cue marks appears, simultaneously closes the shutter on the first projector and opens the shutter on the second projector;
- -Makes changeover happen so quickly that the viewer in the audience does not notice an interruption on the screen;
- -Removes the used reel and rewinds it on the rewinding machine (in new installations no rewinding is necessary. The film is fed out of the center of the platter each time through a series of rollers on back onto another platter. The cycle is repeated for each showing);
- -Repeats the process described above until all the reels have been used.

JOB CLUSTER #3
"Communications and Media"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
Vary	$200-$500/wk	$250-$300/wk	$200/wk

Generally, large theatres pay higher hourly rates.

Hours and salary may vary throughout the state. Check your local theatre for accurate information in your area.

HOURS OF WORK

Most projectionists work evenings. Those employed on a full-time basis work four to six hours, six nights a week.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

paid vacation | hospitalization | premium pay for weekend or holiday work

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LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Check with the manager of your local movie theatre.

ADDITIONAL SOURCES OF INFORMATION:

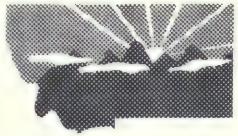
Your school counselor and librarian may also help you find additional information

International Alliance of Theatrical State Employers & Moving Picture Machine Operators of the United States & Canada
1270 Avenue of the Americas, Suite 1900
New York, New York 10020

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Photostat Operator (any ind.)	976.382-022
Photographer Apprentice (print. and pub.)	143.062-018
Chief Recordist	962.134-010

D.O.T. Fourth Edition, page 928



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: MOTORCYCLE MECHANIC

The MOTORCYCLE MECHANIC repairs and overhauls motorcycles, motorscooters, and similar motor vehicles.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Patient	Mechanical	Normal hearing and vision (natural or corrected)
Responsible	Form perception	Agility
Dependable	Manual dexterity	Normal physical strength and stamina
Precise	Finger dexterity	
Independent judgement		
Pride in doing a job well		

YOU SHOULD KNOW THAT

-You will be required to furnish your own hand tools;
-You may have to ride a motorcycle to road-test it;
-There are presently no labor unions representing motorcycle shop employees.

YOU MUST BE ABLE TO

-Lift and/or carry from 20 to 100 pounds;
-Stoop, kneel, crouch and bend for extended periods;
-Tolerate gas, oil, grease, and dirt on hands, arms, face, and clothes;
-Tolerate noise and occasional bruises, cuts, burns, and scrapes.

D.O.T. 620.281-054

PREPARATION AND TRAINING:

The motorcycle mechanic trainee and helper applicants will find that high school graduation is helpful. You should have some training in reading technical instructions and illustrations.

RECOMMENDED HIGH SCHOOL COURSES:

Machine Shop
Auto Shop
Basic Mathematics
Metal Shop

ADDITIONAL FACTS ABOUT TRAINING

On-the-job training is available through the employer. Many motorcycle manufacturers or distributors provide short training courses at no cost. A year or two of successful employment in a mechanical occupation can provide excellent background. The most valuable asset is a genuine interest in motorcycles.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

There is a need for mechanics throughout the state of Montana. Employment in this relatively small occupation is expected to grow rapidly through the mid 1980's.

ADVANCEMENT

Qualified motorcycle mechanics may advance to service managers, salespeople, manufacturers' or distributors' representatives.

MORE ABOUT THE JOB:

The motorcycle mechanic does repair work and preventive maintenance on motorcycles, scooters, and other small vehicles that are powered by motorcycle type engines. As an all-around mechanic, he/she is able to handle the full range of jobs including motor and transmission repairs, electrical work, brake jobs, lubricating, painting, wheel lacing, tire changing, and sometimes frame and fork straightening.

The motorcycle mechanic:

- -Diagnoses mechanical problems and prescribes repairs needed;
- -Measures generator output, ignition timing, and uses engine performance indicators;
- -Dismantles engines and reassembles engines;
- -Repairs or replaces defective parts;
- -Removes cylinder heads;
- -Grinds valves;
- -Replaces defective valves, pistons, cylinders, and rings;
- -Hammers out dents and bends in frame and fenders;
- -Welds tears and breaks;
- -Repairs, adjusts, and tests brakes, clutches, and drive chains;
- -Uses laths, drill presses, and re-boring machines;
- -Uses basic hand tools and electrically powered hand tools;
- -Uses manufacturer's handbooks and illustrations for directions and methods;
- -Test rides motorcycles for performance checks;
- -Inspects parts visually and by touch;
- -Uses feelers, pressure gauges, and similar aids.

JOB CLUSTER #9
"Manufacturing"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
Experienced mechanics	40-48	$5.00-$9.00/hr	$6.25-$7.50/hr	$5.00/hr

Earnings of motorcycle mechanics and trainees vary widely and depend on level of skill, geographic location and employer. Check a local source for accurate area salary information.

HOURS OF WORK

The mechanic works forty to forty-eight hours per week. The average workweek is six eight-hour days.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

- paid vacations
- group life insurance
- health plan
- laundered uniforms
- paid holidays
- sick leave

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Check with local motorcycle repair and/or retail shops.

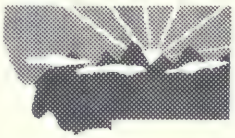
ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Independent Garage Owners of America, Inc.
343 South Dearborn Street
Chicago, Illinois

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Automobile Mechanic	620.261-010
Bus Inspector	620.281-030
Maintenance Mechanic	620.281-046
Firefighting-Equipment Specialist	638.281-010



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB:

MULTILITH OPERATOR
(D.O.T. - OFFSET-DUPLICATING-MACHINE OPERATOR)

The MULTILITH OPERATOR runs small offset printing presses for offices, businesses, government offices, and schools. The job may be as simple as duplicating typewritten material from paper mats or it may involve detailed multi-color work including the making of half-tone negatives and metal plates.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Precise	Mechanical	Good general health
Dependable	Clerical	Eye-hand coordination
Concern for detail		Good vision
Interest in printing		Finger dexterity
		Able to lift up to 100 lbs.

YOU SHOULD KNOW THAT

- -You will be expected to understand the basic principles of offset printing;
- -Besides the multilith, which is the most common small offset press, there are many other offset presses which are similar in design and function;
- -Pay scales vary widely from very low pay for the operator who duplicates only simple typewritten copy to a higher wage for the qualified duplicating department supervisor.

YOU MUST BE ABLE TO

- -Adjust complicated printing machines to do a variety of jobs;
- -Learn the many sheet thicknesses and sizes of paper stock;
- -Lift cases of paper weighing up to forty pounds;
- -Work with many people in an office, each with his/her own set of problems regarding the printing to be done.

D.O.T. 651.682-014

PREPARATION AND TRAINING:

While there is no formal minimum educational requirement, most employers require a high school diploma and you will have a much better chance of getting a job with good pay if you have had some college courses in printing.

HIGH SCHOOL SUBJECTS:

- Business Math
- Business Machines
- Typing
- English
- Spelling
- Machine Shop
- Printing (if available)
- Photography (if available)

COURSE AFTER HIGH SCHOOL:

Many colleges offer courses in printing trades. In addition, you will benefit from courses in commercial art and photography, both of which are part of the graphic arts field.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities in the state of Montana are limited.

ADVANCEMENT

In small businesses, there are few opportunities for advancement.

In large operations, there are many chances for advancement, particularly in those firms where more fine printing work is done.

The operator who starts as a helper may become chief operator or print shop supervisor.

MORE ABOUT THE JOB:

The multilith operator is basically an offset printing operator. He/she is responsible for taking an original copy and duplicating a given number of copies for the person or department which requested the work.

There are three major types of duplication:

Direct Image -- which is the most simple and uses a paper mat on which information has been typed or drawn.
Photo Offset -- in which original copy is filmed using a process camera and a metal plate made from the negative film.
Photo Direct -- in which original copy is placed in a special camera which produced a direct photo image on a paper master.

On photo offset or photo direct methods, the operator may be required to make enlargements or reductions of the original materials.

Once a plate is made, the material is placed into press and secured to the press on a plate cylinder. The paper chosen for the job is placed in the delivery end of the press. The press is adjusted for thickness in size of paper stock. The mat or place is then moistened with a water base solution (ink will stick only to the typed or imaged area). Ink rollers are checked. Test sheets are run through the press to see if the copy is straight, if the margins are set correctly, if the ink is not too heavy or too light. Material is run in the correct amount, then set aside to dry.

JOB CLUSTER #3
"Communications and Media"

SALARY INFORMATION

	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary

Salary ranges vary depending on a particular job, training and skill. Salaries may range from $6.17-$6.47 per hour.

HOURS OF WORK

The basic work week is forty hours, usually from 7:30 or 8:30 am to 4:30 or 5:30 pm Monday through Friday. Some overtime may be required, particularly when rush jobs occur.

FRINGE BENEFITS

Depending on place and length of employment, you may receive:

overtime pay	medical insurance	retirement plan
paid vacation	sick leave	profit sharing

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LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

The local office of the employment service can provide further information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Printing Industries of America, Inc.
5223 River Road
Washington, D.C. 20016

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Cylinder Press Operator (print. and pub.)	651.362-010
Proof-Press Operator (print. and pub.)	651.582-010
Transfer Operator	651.382-038
Web-Press Operator	651.362-030

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB:

MUSIC THERAPIST

Therapeutic powers of music have been recognized through the centuries,but modern music therapy is still a young profession. Music therapy is the use of music to restore, maintain and improve the mental and physical health of individuals by influencing changes in their behavior. Such changes enable the patients undergoing treatment to understand themselves better as well as the world around them and help them adjust to society.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Emotionally stable	Speaking abilities	Good physical health
Patient	Writing abilities	Stamina
Understanding	Musical abilities	
Tactful		
Creative		

YOU SHOULD KNOW THAT

-Therapists employed by school districts also earn tenure after several years' employment. They have summer holidays and, frequently, sabbatical leaves for study, research and travel.

YOU MUST BE ABLE TO

-Accompany and conduct individual or group singing;
-Instruct individuals or groups in playing instruments, such as autoharp, ukulele, guitar, songbells, drums and other percussion instruments;
-Work with individuals or groups on rhythmic activities;
-Direct vocal and instrumental ensembles made up of patients and staff members.

DOT 076.127-014

PREPARATION AND TRAINING:

People who wish to become music therapists must first complete a four-year college course with a major emphasis in music. Half of all college units must be in music and should include music theory, history, conducting, arranging, instrumental and vocal studies and group performance. Along with these courses, students need a strong background in biological sciences, sociology, anthropology, psychology and general studies.

In addition to holding degrees in music therapy from approved colleges or universities, students must complete a six-month clinical training internship. A registered music therapist must direct the internists either during their college years or after they graduate from a recognized college.

Music therapists who expect to work in public schools must have teaching credentials for the state where they expect to work. Frequently, requirements for continuing teaching certification include in-service training.

Music therapists work for hospitals, schools, retirement homes and other community and social agencies where music can contribute to the physical and mental well-being of their clients. Other therapists work in private studios with patients referred to them by medical doctors and psychologists, They work in hospital wards, classrooms, and studio-laboratories. Often, they work under contracts with governmental agencies; state and Federal civil service commissions; or private, voluntary agencies.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

There are not enough music therapists being trained to fill available positions. Music therapy is a fast-growing profession, affording both men and women many opportunities for placement and advancement.

ADVANCEMENT

Employees gain tenure in rank, regular salary increases and fringe benefits after a short probationary service. To become a supervisor, administrator or a full-time researcher in music therapy, one will be expected to study beyond the bachelor's degree and to assume greater responsibility.

MORE ABOUT THE JOB:

Music therapists, as members of a therapeutic team, plan activities to meet the needs, capacities and interests of their patient. Patients are persons of all ages with physical, mental and social problems. Victims of mental retardation, emotional disturbances, cerebral palsy, blindness and those suffering from multiple handicaps or disabilities often benefit from music therapy.

Specific duties of music therapists vary with each institution, age group, or assignment; therefore, they must be versatile and flexible. Therapeutic procedures include diagnosing patients, evaluating their needs, deciding on plans of action and finally putting the plans into action.

JOB CLUSTER #14
"Public Services"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$13,000-$16,500/yr	$14,500/yr	$13,000/yr

Although training and experience are important in establishing individual salaries, the exact amount of any salary is often negotiable. Music therapists in supervisory and administrative positions may earn twice as much as staff therapists.

HOURS OF WORK

Therapists usually work a forty-hour, five-day week. Like other professionals, however, they frequently put in extra hours to deal with special circumstances.

FRINGE BENEFITS

Depending on place and length of employment, you may receive the following:

- vacations and holidays
- health insurance
- worker's compensation
- sick leave
- generous retirement and pension plans
- unemployment insurance

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

ADDITIONAL SOURCES OF INFORMATION:

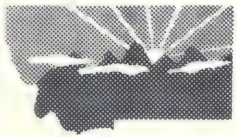
Your school counselor and librarian may also help you find additional information

American Federation of Musicians (AFL-CIO)
425 Park Avenue
New York, NY 10032

National Assn. of School of Music
One Dupont Circle, NW
Washington, D.C. 20036

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Nurse, Licensed Practical Nurse	079.374-014
Nurse Aide/Orderly	355.674-014
Physical Therapist	076.121-014
Occupational Therapist	076.121-010



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: NEW ACCOUNTS CLERK (Banking)

The NEW ACCOUNTS CLERKS work in banks and savings and loan associations greeting prospective customers, providing them with verbal and printed information about the bank services. Their most important job is to create a good impression of the bank.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Poise	Verbal	Average health
Tactful	Clerical	Average eyesight and hearing
Dependable	Numerical	
Neat appearance		
Pleasant voice		

YOU SHOULD KNOW THAT

- -Speaking correct English is important;
- -You will be expected to type well;
- -Personal grooming and appearance are a vital part of this job;
- -You will probably serve an apprenticeship of a year or two in another clerical function within the firm.

YOU MUST BE ABLE TO

- -Meet prospective customers displaying courtesy and poise;
- -Learn the many services offered by your bank or savings association and explain the benefits to customers in a manner which will make them think favorably of the institution;
- -Answer telephone questions efficiently and pleasantly.

DOT 205.362-026

PREPARATION AND TRAINING:

High school graduation is the generally accepted minimum. Employers prefer but do not require those who have had a year or two of college training.

RECOMMENDED HIGH SCHOOL SUBJECTS

English	Business Practices
Sales	Business Math
Business Machines	Bookkeeping
Speech	

COURSE OF STUDY AFTER HIGH SCHOOL

English	Typing
Public Relations	Business Math
Filing	Sales Psychology
Speech	Machine Calculations

ADDITIONAL FACTS ABOUT TRAINING

Much of your training will come on-the-job, usually in another clerical position such as file clerk, bookkeeping clerk, or teller.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

There are relatively few new account clerk's jobs throughout the state.

However, the worker who is willing and capable should have no great amount of trouble in moving into such an occupation after serving as a teller or in other clerical positions for a time.

New account clerks are found in banks and savings and loan associations of all sizes.

Employment chances are best in large city branches where there may be several new account clerks.

ADVANCEMENT

The new account clerk is usually promoted to that position from the rank of file clerk, teller or some other bank clerical positions.

After some time on the job, the clerk may be promoted into commercial or the installment loan department if they show aptitude and interest.

MORE ABOUT THE JOB:

New account clerks help new banking or savings and loan customers to open accounts, provide information about company services, and do clerical work and typing related to these jobs.

They may also serve as a receptionist, and in some cases may assist customers with filling out loan application forms.

New account clerks should be able to speak well, listen attentively and present a good general impression of the bank and its services. They also must be familiar with banking services in general, and those of their bank in particular.

Typical job duties are:

- -Greeting customers as they approach the counter;
- -Explaining various kinds of personal and commercial checking and savings accounts available;
- -Helping the customer fill out proper forms for the particular account desired;
- -Directing customers to teller's windows, loan officers, or other bank personnel who can assist them;
- -Handing out printed information about the bank, savings and loan firm, and its services;
- -Typing necessary support documents which are needed for each account;
- -Securing signatures of customers and maintaining a signature file against which checks and withdrawal slips may be checked.

JOB CLUSTER #2
"Business and Office"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
35-40	$130-$195/wk	$165/wk	$130-$145/wk

Salaries may vary throughout the state. Check a local source for accurate salary information.

HOURS OF WORK

The standard work week is thirty-five to forty hours. Hours of work normally are 9:00 a.m. to 4:30 or 5:00 p.m. with weekends and holidays off.

FRINGE BENEFITS

Depending on the length and place of employment, you may receive:

paid vacation	sick leave
health insurance	paid holidays
paid overtime	retirement plan

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

The personnel office of the local bank can provide further information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

National Association of Bank Women, Inc.
National Office
111 E. Wacker Dr.
Chicago, IL 60601

American Bankers Association
Personnel Administration and Management Development Committee
1120 Connecticut Ave. N.W.
Washington, D.C. 20036

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Claims Clerk (insurance)	205.367-018
Court Clerk	243.362-010
Credit Clerk (clerical)	205.367-022
Order Clerk	249.367-054
Safe-Deposit Clerk (banking)	295.367-022

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: NEW CAR GET-READY MECHANIC

The NEW CAR GET-READY MECHANIC's job is to inspect the car thoroughly to make sure it is in the best condition before it is sold. This consists of inspecting, tuning, and doing any repairs needed, keeping up to date on new models and willingness to read current bulletins regarding factory changes.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Dependable	Mechanical	Normal health
Responsible	Numerical	Good use of arms, hands, and fingers
Accurate	Spatial	
Concern for detail	Verbal	
Able to take orders		

YOU SHOULD KNOW THAT

-Cuts, burns, and bruises are all hazards that go with the job;
-Color blindness disqualifies an applicant;
-Some people that have physical handicaps have become successful new car get-ready mechanics.

YOU MUST BE ABLE TO

-Provide your own hand tools;
-Pay attention to details in making inspections;
-Work in cramped and awkward positions;
-Work in both hot and cold weather, especially in small shops where there is no temperature control.

D.O.T 806.361-026

PREPARATION AND TRAINING:

There is no formal educational minimum; however, most dealers prefer applicants who have completed high school.

RECOMMENDED COURSE OF STUDY:

Automotive Repair and Tune-up	Engine Overhaul
Supervisory Training	Business Administration
Sales Psychology	Customer Relations
Automotive Electronics	Economics

ADDITIONAL FACTS ABOUT TRAINING:

Much of the training will come on the job. Some agencies have their own training program.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Most employment opportunities exist in cities of 50,000 and up.

In smaller dealerships, the mechanic acts as the New Car Get-Ready Mechanic.

ADVANCEMENT

New Car Get-Ready Mechanics usually come from mechanic ranks.

MORE ABOUT THE JOB:

The New Car Get-Ready Mechanic's job is to inspect the car item by item to make sure that the car is in top condition.

The mechanic examines a car from bumper to bumper following a check list that has been supplied by the manufacturer that tells what to look for and what to do. To complete a check list for items under the hood, for example, he or she may have to tighten the cylinder headbolts, adjust the carburetor, inspect the battery, perform a tune-up and adjust the motor. These are only a few of the tasks the new car get-ready mechanic must do. He or she also inspects door and window operations, tests and adjusts lights, brakes and other accessories.

JOB CLUSTER #10
"Manufacturing"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$8.00-$10.00/hr	$8.50/hr	$8.00/hr

Because of varying salary rates throughout Montana, specific information may be obtained at your nearby employment office or garage.

HOURS OF WORK

The forty-hour week is standard. Non-union shops may work nights and more than forty hours.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

paid holidays
retirement program
uniforms paid and laundered by employer
paid vacation
health insurance

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

A major new car dealer can be contacted for more information on the new car get-ready mechanic.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Assembler, Aircraft Structures and Surfaces	806.381-026
Final Inspector, Truck Trailer	806.361-018
Major-Assembly Inspector	801.381-018

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: NOTE TELLER (Banking)

The most commonly thought of bank clerical occupation is that of a teller. However, a great number of bank employees work in other areas of banking and finance in clerical positions related to the servicing of accounts and loans. Among these are the note clerks.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Dependable	Clerical	Average general health
Neat appearance	Numerical	Average vision and hearing
Interest in math	Verbal	
Interest in clerical work		

YOU SHOULD KNOW THAT

- There are increasing opportunities for part-time workers who help out during peak periods of the day;
- You may serve an apprenticeship as a teller before being assigned to note or real estate loan departments.

YOU MUST BE ABLE TO

- Work with all kinds of financial records maintaining accurate files;
- Type neatly;
- Compute interest on a variety of loans using a calculator;
- Balance loan ledgers daily;
- Stand for long periods of time.

D.O.T 211.362-026

PREPARATION AND TRAINING:

A high school diploma is the minimum. Most employers prefer but do not require some college training.

RECOMMENDED HIGH SCHOOL SUBJECTS

- English
- Typing
- Bookkeeping
- Accounting
- Speech
- Business
- Business Machines
- Clerical Practice

COURSE OF STUDY AFTER HIGH SCHOOL

- Machine Calculation
- English
- Accounting
- Bookkeeping
- Economics
- Speech
- Office Machines
- Advanced Clerical Practice

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Jobs are found in banks of all sizes.

The worker who can qualify for initial employment as a clerk or teller should be able to advance to note teller without difficulty.

Job opportunities in the state of Montana are limited.

ADVANCEMENT

Note clerks and tellers already have reached the second level of skill in banking jobs.

There are chances for advancement to other more responsible positions.

These may be designated by special titles according to duties.

MORE ABOUT THE JOB:

The specific duties of note tellers vary depending on the bank or finance company as well as on the size of the office.

Typical duties are:

-Accepting payments on one or all of the following types of loans: real estate, commercial, installment;
-Recording and checking all payments and transactions;
-Computing interest, accruals and principal on loans;
-Debiting checking accounts or issuing billings for payments due;
-Setting up new agreements as directed by the loan officer;
-Maintaining complete financial records of all loans;
-Notifying customer when note is coming due;
-Notifying loan officer of delinquent accounts;
-Preparing various financial statements and reports pertinent to the particular loan;
-Proving all transactions at day's end;
-Balancing cash receipts, loans and ledgers daily;
-Processing paid loan files and surrender notes and collateral to customer on final payment of loans.

Loan clerks in smaller branches may also issue money orders, cashier's checks, or traveler's checks. They may also work with international money orders and provide information on international currency exchanges.

Beginning clerks will usually assist experienced workers and duties may be rather routine until they can demonstrate their ability to handle some of the more difficult tasks.

JOB CLUSTER # 2 - "Business and Office"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	35-40*	$135-$200/wk	$155-$170/wk	$135/wk

*There are also some part-time positions available.

Because of varying rates of pay throughout Montana, specific information on salaries may be obtained at your nearby employment office.

HOURS OF WORK

The standard workweek is thirty-five to forty hours. Some part-time positions of twenty and twenty-five hours exist. The normal workday is 8:30 or 9:00 a.m. to 5:00 or 5:30 p.m.

FRINGE BENEFITS

Depending on place and length of employment, you may receive the following:

paid vacation	paid holidays
paid overtime	retirement plan
health insurance	sick leave

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LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

The personnel office of a local bank can provide further information.

ADDITIONAL SOURCES OF INFORMATION:

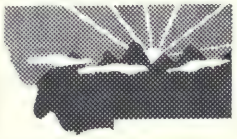
Your school counselor and librarian may also help you find additional information

National Association of Bank Women, Inc.
National Office
111 E. Wacker Drive
Chicago, Illinois 60601

American Bankers Association
Bank Personnel Division
1120 Connecticut Avenue NW
Washington, D.C. 20036

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Audit Clerk	210.382-010
Billings Control Clerk (light, heat, power)	214.387-010
Bookkeeper	210.382-014
Dividend-Deposit-Voucher Quoter (insurance)	216.482-026



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: NURSE'S AIDE

A NURSE'S AIDE performs certain duties not requiring professional training for the hospitalized patient. The aide works under close supervision of a professional nurse.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Patience	Verbal	Normal vision and hearing (natural or corrected)
Tactful	Clerical	Good physical health
Initiative	Manual dexterity	Full use of hands & legs
Good Personal Hygiene	Keep confidential information	Able to perform strenuous physical activity including lifting
Even disposition	Separate work problems from personal problems	
Integrity-honesty		
Able to accept correction		
Dependable		

YOU SHOULD KNOW THAT

-Both women and men can be nurse's aides.
-Men are usually called orderlies.
-A nurse's aide usually provides her own uniforms including shoes.
-You will not qualify if you are carrying any communicable disease.
-Nurse's aides have a skill which enables them to re-enter the labor market at will.
-Nurse's aides must accept the responsibility for their own actions.

YOU MUST BE ABLE TO

-Withstand long periods of time on your feet.
-Endure distasteful and depressing situations such as bad odors, dressing wounds, deaths, severe illnesses.
-Work in close physical and social contact with others.
-Work carefully under stress.
-Keep a confidence.

D.O.T. 355.674-014

PREPARATION AND TRAINING:

The nurse's aide should have completed high school.

Volunteer work and temporary summer jobs in hospitals will furnish experience that is helpful.

Helpful high school courses include any health and first aid classes. Anatomy and Medical Terminology.

The Billings Vocational-Technical Center and the Great Falls Vocational-Technical Center offer courses for nurse's aides.

You may be able to find training in Manpower Development and Training Act classes if need indicates. Check with your counselor on this. Some adult education classes offer courses for nurse's aides.

PROSPECTS AND OPPORTUNITIES:

JOB AVAILABILITY TRENDS

The opportunity for obtaining employment in this occupation is increasing, expecially for experienced nurse's aides. It is expected that the demand will be greater than the supply. Turnover rate is high among nurse's aides. Opportunities are greater in the larger hospitals and convalescent homes.

ADVANCEMENT

Opportunity for advancement is greatly restricted without additional education. There is no established line of promotion, except through merit raises.

MORE ABOUT THE JOB:

The nurse's aide performs various patient care services to provide for the comfort and welfare of patients. She performs bedside care and other services under the direct supervision of registered nurses or physicians. Specific duties will depend upon where she is employed.

In hospitals:
Under direct supervision of a registered nurse, performs those duties which involve minor services in caring for a hospitalized patient. Typical tasks include:

- -gives backrubs
- -records results of routine procedures
- -takes blood pressure
- -bathes patient as directed
- -weighs and measures patients
- -exercises patients
- -collects and replaces refuse bags
- -changes and makes up beds
- -takes and records temperature
- -assists patients with personal hygiene
- -cleans and sterilizes equipment
- -may assist in caring for bodies of deceased.

The nurse's aide is seldom employed in doctor's offices. In clinics, public health service, and convalescent homes, her duties may include:

- -general hospital duties as above
- -preparation of meals
- -changing of linens
- -admission of patients
- -routine cleaning

JOB CLUSTER #8
"Health"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$140-$205/wk		$140/wk

Salaries may vary throughout the state. You may wish to contact a local source for accurate information for your area.

HOURS OF WORK

Normally, a forty-hour week. The nurse's aide is expected to work holidays and weekends getting weekdays off. She may be assigned day or night shifts, or rotate shifts. Overtime may be involved during emergencies.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

- -health insurance
- -retirement plan
- -paid vacations and holidays

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Contact the personnel director of your local hospital.

ADDITIONAL SOURCES OF INFORMATION:

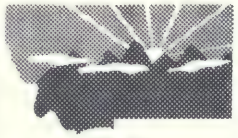
Your school counselor and librarian may also help you find additional information

National League for Nursing
10 Columbus Circle
New York, NY 10019

RELATED OCCUPATIONS:

JOB TITLE:	D.O.T.#:
Physiatric Aide	355.377-014
Practical Nurse	079.374-014
Nursemaid	355.674-010
First Aid Attendant	354.677-010

D.O.T. Fourth Edition, page 241



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: NURSE (L.P.N.)

LICENSED PRACTICAL NURSES provide skilled nursing care to sick, injured and convalescent patients. They work under the general supervision of physicians and registered nurses and may sometimes supervise nursing aides, orderlies and attendants. They work in hospitals, private homes, doctors' offices or clinics.

All states regulate the preparation and licensing of L.P.N's. Requirements include completion of an approved course of instruction and passing a licensing examination.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Patience	Mental alertness	Good physical health
Understanding	Manual dexterity	Normal or corrected vision, hearing and color perception
Emotionally stable	Motor coordination	
Dependable	Verbal	
Mature	Numerical	Finger dexterity
Good judgement		Full use of limbs
		Strength and stamina
		Eye-hand coordination

YOU SHOULD KNOW THAT

-Graduation from an accredited vocational nursing school is necessary for taking the state licensing examination.
-You must pass a physical examination each year; depending on where you work.
-Good mental health is important.

YOU MUST BE ABLE TO

-Accept the responsibility of caring for human life.
-Follow directions exactly and rapidly.
-Learn and apply technical information.
-Show tactfulness and resourcefulness in dealing with patients.

DOT 079.374-014

PREPARATION AND TRAINING:

For admission to most schools of vocational nursing, a high school diploma is necessary for those under eighteen years of age. For adults, a high school diploma or G.E.D. certificate is required.

RECOMMENDED HIGH SCHOOL SUBJECTS:

English	General Science
Basic Math	Chemistry
Typing	

COURSE OF STUDY AFTER HIGH SCHOOL

The licensed practical nursing program usually lasts for twelve months and qualifies the graduate to take an examination given by the Board of Nursing Examiners for a license to practice in Montana. It is an intensive program that includes thirty-five to forty hours a week of combined classroom instruction and supervised work experience of cooperating local hospitals.

The practical nurse programs are offered at Northern Montana College, Billings Vocational Technical Center, Butte Vocational-Technical Center, Great Falls Vocational-Technical Center, Helena Vocational-Technical Center and Missoula Technical Center.
Miles Community College, in Miles City and Northern Montana College, in Havre, offer the associate degree nursing program which is a two-year program.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

There is a continuing demand for practical nurses. There are employment opportunities for both men and women, with the best opportunities being in the urban areas.

Most licensed practical nurses work in hospitals but there is a growing demand for L.P.N's to work in nursing and convalescent homes where they can free registered nurses for more technical work.

ADVANCEMENT

There is little chance for advancement without additional training.

MORE ABOUT THE JOB:

In hospitals licensed practical nurses provide much of the bedside care needed by patients such as:

- -taking and recording temperatures and blood pressure;
- -changing dressings;
- -administering certain prescribed medicines;
- -bathing bed patients and helping them with personal hygiene;
- -assisting physicians and registered nurses in examining patients and in carrying out complex nursing procedures;
- -giving medicine in nursing homes.

Other hospital duties include:

- -assisting in the delivery, care and feeding of infants;
- -helping registered nurses in recovery rooms;
- -some licensed practical nurses help in the supervision of hospital attendants.

Employed in private home, licensed practical nurses care mainly for patients whose day to day care seldom involves highly technical procedures or complicated equipment.

In doctor's offices and clinics, licensed practical nurses help physicians by preparing patients for examinations and treatment. They also make appointments and record information about patients.

JOB CLUSTER #8
"Health"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	35-40	$4.60 - $5.75		$4.60

Salaries vary throughout the state and the nation. Some employers offer extra pay for work between the hours of 3 p.m. and 7 a.m. This pay ranges from $10 a month to $25. You may wish to check a local source for salary information in your area.

HOURS OF WORK

While most L.P.N's work a forty-hour week, the hours can be at any time of day or night. Weekends are considered normal workdays and even holidays are often difficult to get off, although extra pay may be offered then.

FRINGE BENEFITS

Depending upon length and place of employment, you may receive:

- -Overtime pay
- -Paid vacation
- -Retirement plan
- -Health insurance

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Employment Security Division
Box 1728
Helena, Montana 59601

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

National Association for Practical
Nurse Education & Services, Inc.
122 East 42nd Street
Suite 800
New York, NY 10017

National Federation of LPN's Incorporated
250 West 57th Street
New York, NY 10019

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Nurse Anesthetist	075.371-010
Physical Therapist	076.121-014
Dental Hygienist	078.361-010
Medical Assistant	079.367-010

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MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: NURSE (R.N.)

REGISTERED NURSES have a vital part in the care and treatment of the ill. They may work in a hospital or medical clinic, in a medical doctor's office, or in a school. They observe signs and symptoms, and, under orders of a doctor, administer medication and treatment. They may specialize in some aspect of the profession, such as surgical nursing, intensive care, anesthetics or pediatrics.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Dependable	Intelligent	Good health
Patient	Verbal	Normal physical strength and stamina
Good judgement	Numerical	Full use of fingers, arms, hands and legs
Tactful	Managerial	Good eye-hand coordination
Initiative		
Responsible habits		
Courteous		

YOU SHOULD KNOW THAT

-You must be in excellent health and free from communicable disease.
-You will be required to work with modern technical equipment.
-You must treat confidential information as confidential.
-Most nurses are women but opportunities for men are increasing.

YOU MUST BE ABLE TO

-Learn and apply technical medical information.
-Be exact and precise in all duties;
-Accept the responsibility of caring for human life.

DOT 075.374-010

PREPARATION AND TRAINING:

To qualify as an applicant for the licensing examination for a registered nurse, you must have a degree from an accredited school of nursing.

The following are three types of educational programs available:

Diploma programs conducted by hospitals and independent schools, usually requiring three years of training. (Not available in Montana.)

Bachelor's degree programs connected with a college or university, usually requiring four years of study.

Associate degree programs frequently connected with a community college, usually requiring approximately two years of nursing education.

Consult your counselor for a list of nursing schools and further information.

PROSPECTS AND OPPORTUNITIES:

JOB AVAILABILITY TRENDS

Projected opportunities in Montana indicate for the years 1980-1985 are good.

ADVANCEMENT

There are many ways for a registered nurse to progress in their job. This is especially true of the hospital nurse who may progress from general duty nurse to head nurse to supervisor or to assistant director or director of nursing service. These promotions all carry more executive responsibility and less direct contact with patients as you progress. Another possibility for promotion is into specialized fields, such as psychiatric nurse, surgical nurse, nurse anesthetist, coronary care, intensive care, obstetrical and gynecology, or into the field of public health.

MORE ABOUT THE JOB:

As a registered nurse, you will be responsible for the care and comfort of your patients. Most frequently, in a hospital, you will head a team of workers including licensed practical nurses and nurses'aides and be responsible for the care of all the patients in a ward or unit of the hospital. The registered nurse assigns less skilled tasks to other workers leaving more time for professional level duties.

In carrying out the medical treatment plan prescribed by physicians, registered nurses:

-administer medication and treatments;
-observe, evaluate, and record symptoms, reactions, and progress of patients;
-assist in the education and rehabilitation of patients;
-help maintain a physical and emotional environment that promotes patient recovery;
-instruct auxillary personnel or students.

The registered nurse may specialize in one area of nursing.

In addition to completing one of the three types of nursing programs, the student must pass a state board of examination in order to become a registered nurse.

JOB CLUSTER #8
"Health"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$6.30-7.70/hour		$6.30/hr.

Salaries listed represent nurses in hospitals, nursing homes, industry and government.

Because of varying rates of pay throughout Montana, specific information on salaries may be obtained at your nearby hospital or employment office.

HOURS OF WORK

Hospital nurses must be willing to work weekends and nights and rotating shifts as needed. The forty-hour five-day week is usual. Office nurses work a regular forty-hour week, usually from 9 to 6, five days a week. Saturday work in some offices may be required.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

-paid vacation
-sick leave
-health insurance
-retirement plan

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Inquire at your local hospital for more information.

ADDITIONAL SOURCES OF INFORMATION:

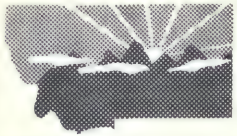
Your school counselor and librarian may also help you find additional information

ANA
Committee on Nursing Careers
American Nurse's Association
2420 Pershing Road
Kansas City, MO 64108

Department of Medicine and Surgery
Veterans Administration
Washington, D.C. 20420

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Nurse, Licensed Practical	079.374-014
Nurse, School	075.124-010
Nurse, Staff Occupational Health	075.374-022
Nurse's Aide	355.674-014



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: NURSERY LABORER (D.O.T. HORTICULTURAL WORKER)

A NURSERY WORKER works with plants, shrubs, and trees, and maintains simple equipment in a nursery or greenhouse.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Reliable	Mechanical	Physical stamina
Good judgement	Spatial	Eye-hand coordination
Likes to work with hands	Manual and finger dexterity	Good general health
Prefers routine activities		Non-allergenic skin
Mature		Agility
Responsible		Normal eyesight
Likes to work outdoors		

YOU SHOULD KNOW THAT

-You may be required to drive a truck;
-You should be able to lift heavy plants and trees;
-You must be able to stand working outside on hot days;
-There are no educational requirements;
-Background or experience in agriculture is preferred;
-Work is often seasonal.

YOU MUST BE ABLE TO

-Use hand tools and in some cases, small power tools;
-Learn to perform routine tasks such as planting, budding, grafting, and trimming;
-Drive a car or truck;
-Comprehend and carry out simple orders.

DOT 405.687-014

PREPARATION AND TRAINING:

There is no minimum educational requirement. However, most employers prefer workers with some formal education and advanced positions usually go to those who have at least a high school education. Candidates without educational training are recommended to have some experience in farm work.

RECOMMENDED HIGH SCHOOL COURSES:

English	Auto or Agricultural Mechanics	Chemistry
Agriculture	Metal Shop	Mathematics
Biology		Botany
Wood Shop		

ADDITIONAL FACTS ABOUT TRAINING

While there is no required amount of educational training, employers are increasingly favoring candidates with a high school training or prior experience in farm labor or a combination of the two. The candidate with more training and/or experience is more likely to advance to higher paying positions.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Work is generally seasonal; however, most nurseries employ a skeleton crew for year-round work.

Employment may be either temporary (summer) or fulltime year-round work.

Nursery workers are employed by either nurseries or greenhouses.

Opportunities for nursery workers are somewhat limited in this state.

ADVANCEMENT

Opportunities for advancement are very limited. The nursery worker with sufficient experience or training can become:

tractor driver	nursery salesperson
crew leader	nursery manager
production superintendent	nursery owner

MORE ABOUT THE JOB:

Nursery laborers are basically unskilled workers who perform physical work, usually using simple machines and driving light trucks.

Specific duties may include:

-Handling and spreading topsoil, fertilizer, and peat moss to condition the soil;
-Digging, raking, and screening soil;
-Filling cold frames and hotbeds to prepare soil for planting;
-Planting, thinning, weeding, watering, and spraying greenhouse stock;
-Sowing grass seed;
-Cutting, rolling, and laying sod to make lawns;
-Digging holes and trenches for drainage tile;
-Setting stepping stones and ornamental rock;
-Building forms and pouring concrete for pools and steps;
-Preparing plants, shrubs, or trees for delivery to the customer;
-Controlling pests (mice and rabbits).

JOB CLUSTER #1
"Agri-Business and Natural Resources"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40-44	$130-$185/wk	$160/wk	$130/wk

Salaries will vary at different nurseries. Check a local source for information for your area.

HOURS OF WORK

The nursery worker usually works eight hours a day and four hours on Saturday. There may be some overtime required occasionally. The work year varies between ten and twelve months. Most businesses employ a skeleton crew for twelve months and a regular work crew for the growing season.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

sick leave
health insurance
annual bonus
paid holidays

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LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Contact your local nursery for further information.

ADDITIONAL SOURCES OF INFORMATION:

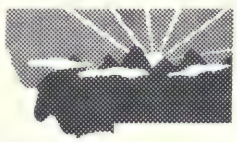
Your school counselor and librarian may also help you find additional information

American Institute of Biological Sciences
3900 Wisconsin Avenue, N.W.
Washington, D.C. 20016

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Tree pruner	408.684-018
Groundskeeper	406.684-014
Plant breeder	041.061-082
Tree surgeon's helper	408.684-018

D.O.T. Fourth Edition, page 271



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: NURSERY MANAGER

The NURSERY MANAGER operates a nursery specializing in trees and other nursery products for sale to farm owners and retail nursery operators. The manager must determine the type and quantity of products to be grown, using knowledge of plant germination, soil conditions, growing characteristics, and market conditions.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Mature	Verbal	Good general health
Responsible	Clerical	Neat appearance
Tactful	Mechanical	Non-allergenic skin
Honest	Finger dexterity	Normal vision & hearing
Able to work with others		Color perception
Able to give orders		Eye-hand coordination
Able to make decisions		

YOU SHOULD KNOW THAT

- -The business is somewhat seasonal and during peak months, you will probably spend most of your time in sales work and supervision;
- -You may own a small nursery operation or be a manager of a larger operation.

YOU MUST BE ABLE TO: - Drive a car;

- -Show the ability to learn the characteristics of a wide variety of trees, shrubs, and other plants;
- -Sell the customer on your products over those of a competitor;
- -Know the area in which you deal, its climate, soil, and crops;
- -Show some clerical skills, such as bookkeeping, especially if you work for a smaller business.

D.O.T 180.167-042

PREPARATION AND TRAINING:

A high school education is the bare minimum and unless you have extensive background in agriculture, college training is necessary. A full four-year college education will even more adequately prepare the potential nursery manager. The beginning candidate usually must spend some time as a nursery worker and/or salesperson before becoming a nursery manager.

RECOMMENDED HIGH SCHOOL COURSES:

Speech	Business
Mathematics	Sales
English	Vocational Agriculture (especially Plant Science)

ADDITIONAL FACTS ABOUT TRAINING

Advanced training at the college level is becoming more and more desirable. A candidate with less education usually must show outstanding potential and extensive background and experience in agriculture nursery work.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Turnover is relatively slow.

The outlook for the entire field of nursery work is good, especially for candidates with some college training.

ADVANCEMENT

With sufficient experience and financial success, the nursery manager (non-owner) can become a nursery owner.

MORE ABOUT THE JOB:

The Nursery Manager:

-May own a small nursery or may manage a larger commercial operation;
-Supervises the planting, cultivating and selling of nursery products;
-May or may not perform actual sales transactions;
-Usually finds initial employment as a nursery worker or salesperson;
-Should have a college degree in agriculture or equivalent experience;
-Must learn to distinguish between various trees and other plants of a particular region and know their characteristics, related diseases, growth techniques, proper fertilizers, insecticides and herbicides, and advise the customer as to which product would best suit their particular needs;
-Must build good business relationships and sell the customer on his/her product rather than one of a competitor;
-Finds his/her work varies with the season;
-Hours of work vary according to weather conditions, market conditions and time of year.

JOB CLUSTER #12
"Marketing and Distribution"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	Vary			

The nursery manager's salary follows no set pattern since it is based almost entirely on ability to attract customers and sell his/her product. In general though, a small nursery owner can attain an annual salary of up to $30,000. A nursery manager usually makes between $11,000 and $18,000 annually.

HOURS OF WORK

The nursery manager generally puts in about 44 hours a week. If he/she is an owner, he/she may put in considerably more. During peak periods, overtime and weekend work is quite common.

FRINGE BENEFITS

Depending on the length and place of employment, you may receive:

health insurance
life insurance
paid holidays and vacation
disability plan
annual bonus

VV10579

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Contact your local nursery for further information on this occupation.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

American Association of Nurserymen, Inc.
230 Southern Building
Washington, D.C. 20005

(Include a self-addressed stamped envelope requesting the pamphlet "Career Opportunities in the Nursery Industry")

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Grounds Keeper	406.684-014
Tree Pruner	408.684-018
Tree Surgeon	408.181-010

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: OCCUPATIONAL THERAPIST (REGISTERED)

OCCUPATIONAL THERAPISTS plan and direct a program of educational, vocational and recreational activities for each patient who is physically and mentally disabled. They may supervise assistants who work with the patients and may also work directly with the patients in specialized activities.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Creative in meeting patients' needs	Good hand-eye coordination and manipulation	Good physical stamina
Warm in relating to people	Skilled with hand and power tools	Excellent health
Versatile in changing techniques		
Responsible and ethical in treatment		
Determined and patient with people		

YOU SHOULD KNOW THAT

The focus of occupational therapy is to provide treatment or retraining for people with physical or emotional problems in order to achieve personal independence and self-sufficiency.

The O.T.R. is often a key member of a treatment team that may include any specialist from the medical and behavioral sciences.

YOU MUST BE ABLE TO

-Relate to a wide variety of clients from diverse cultural and ethnic backgrounds.
-Perform and treat under the supervision of a physician or medical administrator.
-Instruct and utilize treatment media such as wood, clay, leather and the fine arts.
-Retrain clients in the basic activities of daily living.
-Create therapeutic activities for the patients' specific needs.

DOT 076.121-010

PREPARATION AND TRAINING:

Minimal Education and/or Training

Professionally educated in a curriculum accredited by the national accreditation bodies of the profession, has passed the national registration examination of the American Occupational Therapy Association, and holds at least a baccalaureate or basic masters' degree in occupational therapy. There is a minimum six months internship period which must be successfully concluded prior to the issuance of registration credentials.

There are forty-nine colleges and/or universities in the United States that offer an accredited curriculum in occupational therapy. See your counselor for further information.

RECOMMENDED HIGH SCHOOL COURSES:

-Biology
-Sociology
-Psychology
-English
-Speech
-Physiology

PROSPECTS AND OPPORTUNITIES:

JOB AVAILABILITY TRENDS

Occupational Therapists are urgently needed in every area of rehabilitation; hospitals, rehabilitation centers and workshops, nursing homes, private homes, armed forces and schools.

ADVANCEMENT

A career-minded person has good chances of advancement in the work in which one is employed.

MORE ABOUT THE JOB:

Occupational therapy provides services to those individuals whose abilities to cope with tasks of living are threatened or impaired by developmental deficits, the aging process, poverty and cultural differences, physical injury or illness, or psychologic and social disability.

The overall service functions of the occupational therapist are to:

-evaluate the individual client or patient's performance capacities and defects;
-prescribe tasks or activities appropriate to diagnosed handicap;
-encourage patient to participate in prescribed activitiy;
-evaluate response, assess and measure change and development;
-confirm progress of patient, share findings with other members of health care team and make recommendations for further treatment or discharge.

JOB CLUSTER #8
"Health"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$12,000-$17,000	$15,000	$12,000

Administrators' salaries are much higher.

HOURS OF WORK

Normally 40 hours per week.

FRINGE BENEFITS

These may vary with place and length of employment:

-paid vacations
-medical benefits
-health and life insurance
-workman's compensation
-sick leave
-unemployment insurance

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Check with registrar of colleges and universities.
Contact Occupational Therapists practicing in your area.

ADDITIONAL SOURCES OF INFORMATION:

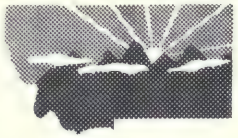
Your school counselor and librarian may also help you find additional information

The American Occupational Therapy Assoc., Inc.
6000 Executive Blvd.
Rockville, MD 20852

National Health Council
Health Careers Program
7090 Broadway
New York, NY 10019

RELATED OCCUPATIONS:

JOB TITLE	D.O.T#
Audiologist	076.101-010
Speech Pathologist	076.107-010
Physical Therapist	076.121-014
Music Therapist	076.167-010



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: OCCUPATIONAL THERAPY ASST. (CERT.)

The OCCUPATIONAL THERAPY ASSISTANT (COTA) assists registered occupational therapists in providing therapeutic activities in the rehabilitation of persons with physical or emotional disabilities at all age levels.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Creative	Knowledge of hand and power tools	Good health
Warm	Mechanical skill	Physical stamina
Versatile		
Responsible		
Determined		
Patient		

YOU SHOULD KNOW THAT

-The goals of all occupational therapists are to promote and maintain health, prevent disability, evaluate behavior and provide treatment for clients with physical and emotional problems.
-the focus of occupational therapy is to assist people to self-sufficiency by maintaining strength, regaining motion and achieving independence.

YOU MUST BE ABLE TO

-Practice under the supervision of a registered occupational therapist and cooperate with all members of the medical team.
-Know and use creative and manual skills such as fine arts, leather carving or weaving.
-Instruct in educational-recreational programs.

DOT 355.377-010

PREPARATION AND TRAINING:

A high school education or its equivalent is required.
It is recommended that the candidate for COTA consult with the director of the school that they plan to attend for guidance in pre-professional course work.
The bulk of high school work should fall within the biological and physical sciences with some shop courses as highly desirable adjunct.

The professional educational process for COTA may be completed by three methods, all of which meet the standards of practice established by the American Occupational Therapy Association.

1. A community agency based certificate program of 20-25 weeks.
2. A one-year program in an accredited educational institution.
3. An associate degree program in an accredited junior/community college.

All programs include supervised practice experience. Upon completion of an approved program and recommendation from the program director, the graduate is eligible for certification as an occupational assistant and becomes a member of the American Occupational Therapy Association.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Therapists are needed in nearly every public and private hospital, in rehabilitation centers and workshops, nursing homes, private homes, armed forces, schools and a variety of community based agencies.

ADVANCEMENT

With appropriate experience and qualified recommendations the COTA may sit for the national registration examination and become a registered occupational therapist with no further formal education.

MORE ABOUT THE JOB:

Certified Occupational Therapy Assistants work under the supervision of professional occupational therapists. Through recreational, educational and vocational activities, they assist in carrying out programs planned to strengthen their patients' muscle power, develop self-efficiency by overcoming disabilities and increase coordination and joint motion. They may also help rehabilitate patients who are physically and/or mentally disabled; instruct patients in creative skills, such as graphic arts, woodworking and ceramics, or in such social and recreational functions as dramatics, gardening, games or self-care skills, including shaving, eating and dressing; work with individual patients or groups including ones confined to bed; order supplies; maintain equipment and tools; and do clerical duties such as preparing clinical notes and keeping patients' records.

JOB CLUSTER #8
"Health"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$675-$1130/mo	$800/mo	$675/mo

Salaries may vary throughout the state. You may wish to check your local hospital for salary ranges in your area.

HOURS OF WORK

Eight hours a day, five days a week. Some nighttime shifts may be necessary on occasion.

FRINGE BENEFITS

Dependent on length and place of employment.

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Contact personnel office at local hospitals, other medical facilities and community health agencies.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

American Occupational Therapy Association, Inc.
6000 Executive Blvd.
Rockville, Maryland 20852

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Ambulance Attendant	355.374-010
Psychiatric Aide	355.377-014
Nurse Aide	355.674-014
Orderly	355.674-018
Physical Therapy Aide	359.354-010

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: OFFICE CLERK

OFFICE CLERKS handle correspondence, record keeping, and other office duties in industry and business. Office clerks make up a large percentage of the total work force in the United States.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Responsible	Clerical	Good general health
Cooperative	Numerical	Normal or corrected vision and hearing
Initiative	Verbal	Full use of hands
Neat appearance		Good eye-hand coordination
Pleasing personality		Good finger dexterity

YOU SHOULD KNOW THAT

-It is possible for people with physical handicaps to perform many tasks in general clerical work;
-You may be given a variety of tasks to perform;
-Clerical jobs may involve routine and monotonous tasks;
-Some clerical jobs require steady application over a long period of time, resulting in some mental and physical fatigue.

YOU MUST BE ABLE TO

-Give unfailing attention to the important details of the job;
-Have speed, but even more important, be accurate;
-Work as part of a team;
-Spell and use English correctly;
-Write legibly and be neat.

DOT 209.562-010

PREPARATION AND TRAINING:

High school graduation is adequate for entry into most office clerk positions. However, training beyond high school will increase both employment and advancement opportunities.

COURSE OF STUDY INCLUDES

English
Spelling
Arithmetic
Filing
Typing
Record Keeping
Business Machines

ADDITIONAL FACTS ABOUT TRAINING

This is often an entry level job for which on-the-job training is often given. Tests for clerical aptitude is common procedure and the tests may include reading comprehension, numerical skill, and spelling ability. Because of increased automation in office work, a great many jobs require specialized skills which can be learned by taking special courses.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Projected opportunities in Montana indicate for the years 1980-90 are good.

Jobs most affected in the future by automation are the more routine ones, and the least affected will be those which have considerable contact with other people.

ADVANCEMENT

Advancement outlook is still good because many new clerical jobs are being created in connection with the operation of electronic computers and related equipment.

With additional training, general clerks may be promoted into the following areas: insurance clerk, secretary, stenographer, claim clerk, complaint clerk, bill collector, receptionist, switchboard operator, tax clerk, manifest clerk, contract clerk, and keypunch operator.

MORE ABOUT THE JOB:

Because of the variety of operations performed, office clerks must be flexible and adaptable to change. Many office clerks are called general clerks since they handle miscellaneous clerical tasks.

Specific jobs under the heading of office clerk include messenger, receptionist, mail clerk, file clerk, correspondent clerk, bookkeeping clerk, and general secretary. In most business organizations, the office clerk may do any of the following:

- -Copies data;
- -Compiles records;
- -Tabulates material;
- -Records orders;
- -Provides information;
- -Receives cash;
- -Provides receipts;
- -Prepares statements;
- -Adjusts complaints;
- -Opens mail;
- -Purchases supplies;
- -Posts data in books;
- -Computes: wages, taxes, premiums, commissions, payments;
- -Inventories stock;
- -Compiles data;
- -Answers letters;
- -Routes materials;
- -Files reports and other claims;
- -Operates switchboard;
- -Greets visitors;
- -Operates mailing machines
- -Operates postage meters;
- -Locates materials;
- -Verifies information;
- -Performs notary public duties;
- -Operates duplicating equipment
- -Serves as vacation relief in other departments.

JOB CLUSTER #2
"Business and Office"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$135-$185/wk	$145-$165/wk	$135/wk

Salaries may vary throughout the state. Check your local employment service or other source for accurate information in your area.

HOURS OF WORK

The normal workweek is forty hours. Overtime is seldom required.

FRINGE BENEFITS

Depending on place and length of employment, you may receive:

- health insurance
- retirement plan
- paid holidays
- paid vacations
- group life insurance
- hospitalization insurance

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Employment Security Division
Employment Security Building
Helena, Montana 59601

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information.

Division of Vocational and Technical Ed.
Bureau of Adult Vocational and Library Programs
U.S. Office of Education
Washington, D.C. 20202

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Coding Clerk	209.387-010
Letter-of-credit clerk	219.387-018
Trust vault clerk	216.367-014
Film rental clerk	295.367-018

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: OFFICE MACHINE SERVICER

OFFICE MACHINE SERVICERS inspect, adjust, repair and clean such machines as typewriters, duplicating machines, and calculators. They may specialize in one machine, and be called for example, a typewriter service worker.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Neat appearance	Mechanical	Good health
Patient	Numerical	Normal vision and hearing (natural or corrected)
Adaptable	Some Verbal	Good eye-hand coordinator
Prefer working with tangible objects		Good hand and finger dexterity
Able to work with people		

YOU SHOULD KNOW THAT

-For most jobs, you must have a valid driver's license or be able to obtain one;
-Working conditions are usually clean and safe.

YOU MUST BE ABLE TO

-Handle many different kinds of problems with machines relying on your knowledge of electrical and mechanical principles and your knowledge of the machines themselves;
-Maintain good relations with customers who will at times be impatient to see repair work done;
-Use various small handtools with precision.

D.O.T. 633.281-018

PREPARATION AND TRAINING:

High school graduation plus some college training is becoming more important as machines become more complex.

RECOMMENDED HIGH SCHOOL SUBJECTS:

Algebra	Shop
Speech	English

POST HIGH SCHOOL COURSES:

Electronics	Speech
Electricity	Liberal Arts
Salesmanship	

On-the-job training will be available.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Projected opportunities in Montana indicate for the years 1980-90 the industry expansion will be good.

Office machine service workers are employed by sales and service centers of manufacturers' office machines and by independent repair and servicing businesses.

A small number work for governmental agencies.

ADVANCEMENT

Qualified service workers who stay in service may become service managers and supervisors.

Many qualified service workers who work for manufacturers in service centers go into sales which is usually better paying.

MORE ABOUT THE JOB:

Office machine servicers usually do not work on all machines used in an office. They tend to specialize in one or two machines or on several machines made by their employer if they work for a manufacturer's service and sales outlet.

Typical machines maintained by office machine service workers include:

typewriters	accounting machines
calculators	adding machines
duplicators	tabulating machines

The regular duties of the office machine servicer vary depending on the nature of the employer. Some servicers work only in a shop performing repair work. Others, usually employed by manufacturers, make routine service calls to check machines, perform regular adjustments, and make minor repairs. Most servicers make emergency calls when machines break down.

Some of the specific operations which office machine servicers perform are:

-Disassemble and assembling machines;
-Lubricating parts where necessary;
-Keeping records of work performed;
-Cleaning machines;
-Replacing worn and broken parts;
-Checking machines following work performed.

JOB CLUSTER #12
"Marketing and Distribution"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	40	$175-$275/week	$210-$260/week	$175/week

Workers who develop specialized skills and are fast and thorough can earn more. Those who perform only routine service are more likely to be at the bottom of the scale.

HOURS OF WORK
Most servicers work forty hours Monday through Friday. Servicers with large areas to cover sometimes are required to make overnight trips. Overtime is infrequent and usually for emergency repairs.

FRINGE BENEFITS
Depending on length and place of employment, you may receive:

paid vacations and holidays	retirement plans
group insurance	company cars (some companies)
sick leave	commissions for making sales

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Information may be obtained from local dealers who sell and service office machines or from branch sales and service offices of equipment manufacturers.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Maintenance mechanic	638.281-014
Inspector, typewriter assembly and parts	706.381-022
Cash Register Servicer	633.281-010
Assembly Technician	633.261-010

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: OPERATING ENGINEER (CONSTRUCTION MACHINE OPERATOR)

CONSTRUCTION MACHINE OPERATORS, also called OPERATING ENGINEERS, operate power-driven machines, such as bulldozers, shovels, cranes, tractors, pile drivers, concrete mixers and pumps. CONSTRUCTION MACHINE OPERATORS most commonly work in the ever-exapnding construction industry, but they are found in a variety of other industries as well.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Accurate	Mechanical	Good health
Precise	Spatial	Good muscular coordination
Attention to detail		Good vision
Like outdoor work		Average strength
Cooperate with others		Above average eye-hand-foot coordination

YOU SHOULD KNOW THAT

-Considerable dust and dirt is a normal part of the job. Those whose eyes, ears, nose, throat, and lungs cannot withstand this condition should not consider being an operationg engineer;
-The work is dangerous;
-Operating engineers must belong to the International Union of Operating Engineers.

YOU MUST BE ABLE TO

-Work in physically uncomfortable situations as a frequent, almost regular,thing;
-Withstand constant shaking and noise from machines which you will operate;
-Adapt to frequent changes of work sites and conditions because operating engineers rarely work in one place for long periods of time;
-Perform some repair and maintenance work on the machines you operate.

DOT 859.683-010

PREPARATION AND TRAINING:

In general, a high school education or its equivalent is the minimum educational requirement. Some college training in construction technology and related fields is recommended for those who wish to assure themselves the best possible opportunity for security and advancement in the field. In addition to the formal education requirements, apprenticeship programs are standard training for those learning the trade.

RECOMMENDED HIGH SCHOOL COURSES

Mechanical Drawing	Welding	Physics
Electrical Shop	Metal Shop	
Auto Shop	Basic Math	

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities for operating engineers are limited in the State of Montana.

ADVANCEMENT

Promotion is in the form of pay increases.

MORE ABOUT THE JOB:

The job covers the operation of many different types of equipment. No one operating engineer may expect to become skilled in all the branches of this craft.

He/she usually specializes in one of four major occupational categories:

-Grade and paving equipment operators;
-Heavy duty mechanic repair;
-Equipment operators;
-Plant equipment operators.

He/she may make minor adjustments and repairs on the equipment.

He/she must constantly retrain himself/herself on new equipment.

JOB CLUSTER #4
"Construction"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	40	$11.72		*

* Beginning salaries depend upon training. If in an apprenticeship program, percentage of journeymen wages are paid with increases at different intervals of training.

HOURS OF WORK

Forty-hour workweek is standard. Premium pay rates are the rule for certain working conditions. Overtime is paid in some areas at time and a half.

FRINGE BENEFITS
Depending on length and place of employment, you may receive:

paid vacations
dental benefits
paid holidays
pension plan
disability program

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

A local construction company may be able to provide further information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

International Union of Operating Engineers
1125 17th St. N.W.
Washington, D.C. 20036

Associated General Contractors of America, Inc.
1957 E. St. N.W.
Washington, D.C. 20006

For apprenticeship information, contact:

Administrator, Montana Operating Engineers & A.G.C.
Joint Apprenticeship Council
1710 9th Avenue
Helena, Montana 59601

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Ballast-Regulator Operator (const.)	859.683-018
Road-Mixer Operator	859.683-026
Sweeper Operator (const.)	919.683-022
Tamping-Machine Operator (r.r.trans.)	859.683-018

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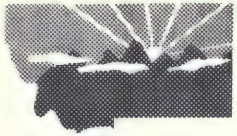


MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: OPERATING ROOM TECHNICIAN

The job of OPERATING ROOM TECHNICIAN is a comparatively recent addition to the surgical team. The work of OPERATING ROOM TECHNICIAN is part of the allied health services developing rapidly to relieve doctors and nurses of routine or specialized tasks in order to free them for the more highly skilled service for which they are trained.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Responsible	Good manual dexterity	Good physical health
Concern for others	Work calmly in tense situations	Full use of limbs
Cooperative		
Conscientious		
Accurate		
Cautious		

YOU SHOULD KNOW THAT

-You will be expected to be "on call" for long hours.
-You must be able to work on your feet for long periods and may frequently be in a situation demanding objectivity while still maintaining a sense of teamwork.
-You must be at least eighteen and be a high school graduate.

YOU MUST BE ABLE TO

-Maintain the highest standards of professional conduct and patient care.
-Handle tension objectively while still maintaining a sense of teamwork.
-Adhere to code of ethics at all times in relations with all members of the health care team.

DOT 079.374-022

PREPARATION AND TRAINING:

Candidates for operating room technicians or surgical technicians are generally required to be high school graduates, or equivalent, and eighteen years of age.

RECOMMENDED HIGH SCHOOL SUBJECTS

Biology	Chemistry	Mathematics
Health	English	First Aid

COURSES OF STUDY AFTER HIGH SCHOOL

Anatomy	Chemistry	Medical ethics and legal responsibilities
Psychology	English	Operating room procedures
Biology	Medical terminology	Operating room assistance methods
Microbiology		Operating room instrument and equipment

Although some technicians become qualified through inservice training, the trend is toward hiring technicians who have trained in formal courses given in hospitals, junior colleges, vocational schools or adult education facilities.

PROSPECTS AND OPPORTUNITIES:

JOB AVAILABILITY TRENDS

Operating room technicians have become an important member of the surgical team in many hospitals and the demand for their services is on the increase.

ADVANCEMENT

At present, opportunities for advancement are generally restricted to increased pay for experience and additional education. Opportunities in the health field are expanding rapidly, however, some opportunities for the technician will be created in the near future particularly in the larger medical centers.

MORE ABOUT THE JOB:

The operating room technician, also called surgical technician, performs any combination of the following tasks before and during an operation:

-wash, shave and disinfect the operative area of the patient;
-place equipment and supplies in the operating room;
-arrange instruments as specified by the operating room supervisor;
-aid members of the surgical team to don gowns and gloves;
-maintain specified supply of fluids for operating use;
-adjust lights and other equipment as directed;
-assist in administering transfusions;
-hand instruments to surgeon;
-hold retractors and cut sutures;
-help transfer patient to recovery room;
-collect used equipment and sterilize it;
-prepare operating room for next operation.

JOB CLUSTER #8
"Health"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
			$773/mo - $938/mo

Salaries may vary throughout. Check your local hospital for current information in your area.

HOURS OF WORK

The operating room technician generally works a regularly scheduled eight-hour day, five day week. The technician may wish to, or may be required to, sign for "on call" to be summoned for emergency work during any time of the day or night.

FRINGE BENEFITS

Fringe benefits vary from hospital to hospital but usually include the following:

-group medical care
-pension plans
-vacations
-holidays

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Contact your local hospital.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Association of Operating Room Technicians, Inc.
1100 West Littleton Blvd., Suite 201
Littleton, CO 80120

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Ambulance Attendant	355.374-010
Occupational Therapist	076.121-010
EEG, EKG Technicians	078.362-022
Anesthetist	070.101-010
Medical Lab Technician	078.381-014
Medical Assistant	079.367-010
Medical Technologist	078.361-014

D.O.T. Fourth Edition, page 65

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: OPTICAL BENCH TECHNICIAN

The OPTICAL BENCH TECHNICIAN marks and cuts, grinds and polishes lenses to fit the frame, bevels, or smoothes the edges of the lenses and puts into finished eyeglasses.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Dependable	Numerical	Average health
Neat appearance	Spatial	Good vision
Precise		Good finger dexterity
Patient		
Accurate		

YOU SHOULD KNOW THAT

- -You should have basic courses in science and physics;
- -High school graduates can prepare for this work through formal apprenticeship programs;
- -Manual and finger dexterity are basic aptitudes for this occupation.

YOU MUST BE ABLE TO

- -Perform calculations accurately;
- -Work with precision equipment;
- -Follow directions.

D.O.T 716.280-014

PREPARATION AND TRAINING:

High school graduation is a requirement for this job.

Firms are always looking for employees with a potential for advancement.

Most training is acquired on the job, although a few colleges offer two-year full-time courses. Check with your counselor for this information.

RECOMMENDED HIGH SCHOOL SUBJECTS

Basic Science courses
Physics
Algebra
Geometry
Mechanical Drawing

COURSE OF STUDY AFTER HIGH SCHOOL

To advance to a dispensing optician apprentice, additional courses such as optical mechanics, optical physics, physiology of the eye, and use of precision equipment should be taken.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

The projected opportunities in Montana indicate that there will not be many jobs available in this occupation.

ADVANCEMENT

Optical laboratory mechanics can become supervisors, foremen, and managers. Many optical mechanics have become dispensing opticians.

MORE ABOUT THE JOB:

Most optical bench technicians learn this skill through informal on-the-job training.

Trainees start in jobs requiring simple skill and dexterity and gradually work into the more difficult jobs.

As an optical bench technician trainee, you may:

-Begin by processing lenses through a lens-grinding machine;
-Perform other production operations such as polishing, edging, lens cutting, and eyeglass assembly;
-Receive instruction in the measurement and curvature of lens surfaces and the measurement of lenses.

JOB CLUSTER #8
"Health"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40-44	$200-$290/wk	$220-$240/wk	$200/wk

Salaries may vary according to geographical areas. A local source should be checked for accurate salary information.

HOURS OF WORK

Hours of work are likely to be quite regular from 8:00 or 9:00 a.m. to 5:00 p.m. five days a week.

Occasionally overtime is required.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

paid vacation
profit sharing
hospital insurance
life insurance

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

A local optician may be able to provide you with further information

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

American Board of Opticianry
821 Eggert Road
Buffalo, New York 14226

Optical Wholesalers Association
222 West Adams Street
Chicago, Illinois 60606

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Lay-Out Person, Bench (optical goods)	716.381-014
Optician, Contact-Lens Dispensing (ret. tr.)	713.361-014
Surface-Lay-Out Person (optical goods)	716.381-014

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: OPTOMETRIST

The OPTOMETRIST helps people improve their vision by examining their eyes and prescribing treatment with medicine, drugs, surgery, or glasses.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Honest	Verbal	Good general health
Alert	Mechanical	Eye-hand coordination
Thorough	Numerical	Color perception
Dependable	Scientific	Free of communicable disease
Calm		Normal vision and hearing (natural or corrected)
Ability to work with people		

YOU SHOULD KNOW THAT

-A minimum of five years of college is required, and the number of years may total as much as seven or eight;
-New optometry graduates in private practice make less money during the first few years than graduates who take positions in clinics, but this situation reverses once the graduate becomes established and experienced;
-About 90% of all optometrists are in private practice.

YOU MUST BE ABLE TO

-Complete a five- or six-year course of study at one of the less than a dozen recognized optometry schools in the nation;
-Work well with people and inspire the confidence and trust of patients and co-workers;
-Learn and apply great amounts of scientific and technical information.

DOT 079.101-018

PREPARATION AND TRAINING:

The optometrist must meet the following educational and training requirements;

-High school graduation with a good academic record;
-Two years of pre-optometry training at an approved college or university; and four years training at an approved optometry school.

RECOMMENDED HIGH SCHOOL COURSES:

A college prep course is recommended with particular emphasis on math, English, and the sciences including chemistry, biology, physiology, physics and anatomy.

PRE-OPTOMETRY COURSES:

In optometry school, you will obtain classroom and laboratory training as well as professional experience through work in the outpatient clinics run by the schools.

ADDITIONAL FACTS ABOUT TRAINING

After graduation from an approved school of optometry, you will be eligible to take a state examination. Successful completion of this examination will qualify you to practice optometry. The test covers the following areas: ocular anatomy, ocular pathology, optometric methods, theoretical optometry and other areas as well as a clinical examination.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities are best in towns and small cities for the new optometrist.

ADVANCEMENT

New optometrists can advance in one of several ways:

-Specialize in one area;
-Start his/her own private practice.

MORE ABOUT THE JOB:

The optometrist:

-Helps people protect their eyes, improve or correct their vision and take steps to insure that vision does not deteriorate;
-Examines eyes;
-Makes tests to determine defects in vision;
-Prescribes eyeglasses, contact lenses, corrective eye exercises and other treatments that do not require drugs or surgery;
-Supplies patients with eyeglasses prescribed;
-May do minor repair on eyeglasses;
-May specialize in work, such as fitting partially sighted persons with telescopic eyeglasses, or studying the relationship of vision to highway safety;
-May specialize in teaching or lecturing;
-Refers persons suspected of having eye diseases to medical practitioners, usually opthamologists;
-Uses a variety of mechanical equipment, hand instruments and tests to perform the duties of his/her profession.

JOB CLUSTER #8
"Health"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$16,900-$33,500/yr	$19,00-$24,000/yr	$16,900/yr

Salary increases come with an established practice. The best place to become established in the shortest length of time is a small city or town.

HOURS OF WORK

The optometrist usually works a forty-hour week. He/she generally works about 7 or 8 hours a day five days a week. Some overtime or weekend work may be necessary.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

life insurance
health plan
sick leave
vacations
holidays

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Talk to a local optometrist for further information.

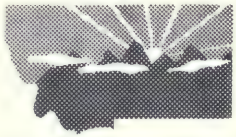
ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Illinois College of Optometry
Indiana University, Optometry Division
Los Angeles College of Optometry
Ohio State University College
University of Houston, School of Optometry
University of California, School of Optometry

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Audiologist	076.101-010
Chiropractor	079.101-010
Podiatrist	079.101-022
Speech Pathologist	076.107-010



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: ORDERLY

An ORDERLY performs numerous tasks contributing to the comfort and welfare of patients. An ORDERLY works under the close supervision of registered professional nurses and resident physicians.

Men are usually called orderlies and women generally are known as nursing aides. Training and duties, for the most part, are the same.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Initiative	Verbal	Normal vision and hearing
Personal cleanliness	Some clerical	Full use of hands and legs
Sound judgement		Good general health
Patient		Above average stamina
Interest in helping people		Able to lift patients
		No communicable disease

YOU SHOULD KNOW THAT

-Prospects for advancement are limited without further schooling;
-You must at all times have a desire to help sick people and be able to understand that your job may involve unpleasant duties;
-If you can't stand the sight of blood, forget this job.

YOU MUST BE ABLE TO

-Carry out orders swiftly and accurately;
-Work under distasteful and depressing situations at times;
-Perform numerous simple tasks which may become repetitive;
-Stand and walk constantly during long periods;
-Stoop and lift patients and equipment.

DOT 355.674-018

PREPARATION AND TRAINING:

There is no formal minimum educational requirement. However, all employers say they would prefer high school graduates.

Helpful high school courses include all health and first aid classes. The Billings, Great Falls, and the Helena Vocational-Technical Centers have courses for nurse's aides and orderlies.

Experience as a medical corpsworker in one of the services is valuable training.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities exist in both institutional and private duty employment.

The projected opportunities in Montana indicate that for the years 1980-85 the industry expansion will be 850, replacement needs 840, total jobs available for this period, 1,690.

ADVANCEMENT

Advancement is limited and occurs only with additional training. There is no regular line of promotion.

Most hospitals have in-line promotions that are based on performance and longevity.

MORE ABOUT THE JOB:

Orderlies perform numerous tasks for the comfort and welfare of patients. In all cases, the orderly works under the direction of a professionally trained medical person. Specific duties will depend on where the orderly is employed.

In hospitals an orderly may:

-Move or lift patients;
-Make beds;
-Serve meals to patients;
-Take temperature and pulse;
-Help patients dress and undress;
-Give alcohol rubs;
-Collect specimens for lab analysis;
-Administer catheterization;
-Help feed patients;
-Keep charts of food and liquid intake and output;
-Help set up equipment such as oxygen tents;
-Accompany patients in wheelchairs to x-ray or surgery.

An orderly may also help keep hospital wards clean. They may empty wastebaskets and trash containers, and be responsible for seeing that the ward is kept clean throughout the day.

JOB CLUSTER #8
"Health"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$140-$205/wk	$170/wk	$140/wk

Salaries for an orderly vary considerably from place to place and depend to some extent on how hard the particular job is.

Because of varying rates of pay throughout Montana, specific information on salaries may be obtained at your nearby employment office or hospital.

HOURS OF WORK

Although the forty-hour workweek is standard, an orderly may work weekends, holidays, or nights since the hospital is operated on an around the clock basis.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

health insurance	free uniforms	paid holidays
paid overtime	retirement program	uniform laundry
paid vacation	free meals	sick leave

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Contact the personnel director of a local hospital.

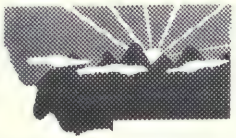
ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information.

Division of Health Careers
American Hospital Association
840 North Lakeshore Drive
Chicago, Illinois 60611

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Ambulance Attendant	355.374-010
Tray-line Worker (medical services)	355.677-010
Physical Therapy Attendant	355.354-010
First Aid Attendant	354.677-010
Psychiatric Aide	355.377-014



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: ORTHODONTIST

The ORTHODONTIST prevents, diagnoses, and corrects deviations from the normal development of teeth. He/she is a trained dentist with additional specialized training.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Dependable	Scientific	Good general health
Thorough	Verbal	Free of communicable disease
Patient	Numerical	Eye-hand coordination
Pride in work	Spatial	Finger dexterity
Able to work with people	Some mechanical	Agile
		Good vision and hearing (natural or corrected)

YOU SHOULD KNOW THAT

- -You must complete regular dental training of six to seven years plus specialized training of two to three years;
- -Working conditions are pleasant but you may suffer from back and foot trouble due to the fact that you must stand while working;
- -Opportunities for employment are excellent.

YOU MUST BE ABLE TO

- -Learn and apply great amounts of scientific and technical information;
- -Get along with people, and inspire the trust and confidence of patients;
- -Spend long hours on your feet and tolerate unpleasant odors;
- -Pass a rigid state examination for regular dental work plus an additional examination covering orthodontal techniques.

D.O.T. 072.101-022

PREPARATION AND TRAINING:

The orthodontist must meet the following educational and training requirements:

- -Completion of a college preparatory program with good academic study;
- -Completion of at least two years of pre-dental work at an approved college;
- -Completion of a four- or five-year program at an approved dental college; and
- -Two to three years specialized training as a dental intern or resident in a hospital.

RECOMMENDED HIGH SCHOOL COURSES:

A college preparatory course is necessary with particular emphasis on math and science. A good academic record is important.

COLLEGE COURSES:

Courses in math and the physical and life sciences are recommended. The specific course requirements vary depending on the particular dental school you plan to attend.

DENTAL SCHOOL:

The first two years are usually devoted to classroom and laboratory instruction in such areas as anatomy, bacteriology, and pharmacology. The last two years are spent gaining experience, usually through work on patients in the school's outpatient dental clinic. The degree conferred after completion is the Doctor of Dental Surgery (DDS).

ADDITIONAL FACTS ABOUT TRAINING

To qualify as an orthodontist, you must complete two to three years specialized training usually obtained through internship as dentist, residency at a hospital, and graduate specialized courses.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

There is a shortage of trained, qualified orthodontists.

Opportunities are good in all areas of the state, but the best are in the larger cities.

The newly licensed orthodontist can most easily establish a practice in a small city or town.

OPPORTUNITIES FOR ADVANCEMENT

Advancement usually comes in the form of increased number of patients and income.

MORE ABOUT THE JOB:

The Orthodontist:

- -Is a general dentist (DDS) who has undergone two to three years of specialized training in orthodontics;
- -Must complete up to ten years of post high school training;
- -Is usually a private practitioner but may work in a clinic or hospital;
- -Must tolerate unpleasant odors, usually in the form of bad breath;
- -Must pass rigid licensing examinations for regular dentistry and orthodontics;
- -Must learn and apply great amounts of scientific and technical information.

He/she may:

- -Prevent, diagnose, and correct deviations in the normal development of gums, teeth, and jaw;
- -Design, adjust, and install such corrective devices as braces, space maintainers, retainers, bite plates, arch wires, head caps, and other aids;
- -Examine teeth using a variety of hand and machine dental instruments;
- -Refer patients to other specialists where dental surgery, tooth removal or fillings are necessary;
- -Periodically check and adjust corrective devices;
- -Keep records on the patient's tooth history.

Equipment may include:

cephalometric radiograms
wrist radiograms
height and weight measuring devices
X-rays and/or dental photographs
tooth drills and hand instruments

JOB CLUSTER #8
"Health"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary

The beginning Orthodontist may start at about $20,000 a year after expenses. However, as the practice is built the salary is considerably more.

HOURS OF WORK

The orthodontist generally works five days a week for a forty-hour week. He/she can set their own hours of work and may work overtime and on weekends if they choose.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

life insurance
medical plan
retirement
holidays
vacations

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

A local orthodontist could give you further details.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

American Dental Association
211 East Chicago Avenue
Chicago, Illinois 60611

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Oral Pathologist	072.061-010
Dentist	072.101-010
Oral Surgeon	072.101-018
Endodontist	072.101-014

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: PAINTER (Construction and Maintenance)

The CONSTRUCTION and MAINTENANCE PAINTER, with a knowledge of paints and other covering materials, applies decorative and protective coatings to all kinds of structures. The qualified journeyman can perform all the functions of any project.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Honest	Spatial	Good general health
Responsible	Numerical	Full use of arms and hands
Careful	Some mechanical	Good color perception
Precise		Good eyesight (natural or corrected)
Able to work without supervision		

YOU SHOULD KNOW THAT

-Job hazards include falls, strains from lifting, and irritation from paint fumes;
-The normal method of becoming a journeyman painter is to serve a formal apprenticeship.

YOU MUST BE ABLE TO

-Work indoors or out in a variety of weather conditions;
-Work in awkward positions such as stooping and bending;
-Work from heights on ladders, scaffolding and stagings without abnormal fears;
-Distinguish fine color shadings.

DOT 840.381-010

PREPARATION AND TRAINING:

Construction and maintenance painters should, although it is not always absolutely required, have a high school education or its equivalent. In most cases, they must serve an apprenticeship before qualifying as a journeyman. In some cases, where the applicant can prove experience and demonstrate skills, they can become a journeyman without first being an apprentice.

COURSE OF STUDY INCLUDES:

High School: Art, chemistry, English, math.

Apprenticeship: On-the-job training and classroom instruction in color harmony, paint chemistry, cost estimating, making and mixing paints.

ADDITIONAL FACTS ABOUT TRAINING

Experience in painting skills gained while in the military service may be acceptable as a portion of the apprenticeship. Previous work experience is not necessarily a requirement for the young person who wishes to start as an apprentice.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

The projected opportunities in Montana indicate for the years 1980-90, the industry will be 0, replacement needs 140, total jobs available for this period, 140.

Most painters are found in urban areas and areas of considerable building activity.

ADVANCEMENT

Apprentices are promoted to journeymen on completion of their apprenticeships. Journeymen may be promoted to job or shop foremen or cost estimators.

MORE ABOUT THE JOB:

In finishing the interior walls of a new building, for example, a painter first prepares the walls to obtain a smooth clean surface. The painter then applies an undercoat or prime coat using a brush, roller, or spray gun. When the prime coat is dry, he/she applies one or more finish coats.

Repainting the room requires removal of old paint with a commercial paint remover, wire brushes, scrapers, and sometimes blow torches. Prime coat and one or more coats of finish paint is supplied. Refinishing requires good skills, especially in surface preparation. Skill and surface preparation is considered by many to be the chief characteristic that sets the true journeyman painter apart from the brush hand. Paint mixing and matching is an important aspect of the painter's job. However, in recent years, this task has been made easier by the use of premixed paints.

Painters are usually able to do one or two tasks better than others and may be given assignments on the basis of individual flair and preference.

Apprentice painters in the early stages of apprenticeship work as all-around helpers. In the paint shop, the apprentice selects materials and equipment for the job. At the job site, he/she cleans brushes, lays out and tends rigging and scaffolding, and brings various items to the painters. The apprentice also prepares surfaces for painting by sanding, puttying and patching.

JOB CLUSTER #4
"Construction"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary

37½-40 Union rate is $10.29/hour

Hourly wages may vary throughout the state. Check your local union or employment service. Remember, there may be layoffs because of inclement weather or slow construction.

HOURS OF WORK

The normal workweek varies between thirty-five and forty hours per week Monday through Friday.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

- paid vacation
- paid holidays
- health plan
- welfare plan
- pension plan

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Look in the yellow pages of your phone book for a painting contractor.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information.

Brotherhood of Painters, Decorators, and Paper Hangers of America
217-219 North 6th Street
Lafayette, Indiana 47901

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Plasterer	842.361-018
Tile Setter	861.381-054
Lather	842.361-010
Terrazzo Worker	861.381-046
Engraver (print. and pub.)	979.381-010

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: PAPERHANGER

A PAPERHANGER covers interior walls and ceilings of rooms with decorative wallpaper or fabric.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Dependable	Artistic touch is an asset	Good physical condition
Conscientious	Discerning color sense	Non-allergenic
Trustworthy	Numerical	Average physical stamina
Ability to work alone or with others		Manual dexterity
Neatness in working habits		
Initiative		

YOU SHOULD KNOW THAT

-paperhangers risk injury from slips or falls from ladders or scaffolds.
-papering ceilings can be very tiring on the arms, back, and neck.
-the period of training is relatively short and the hourly earnings are very good.
-this trade can be combined with painting.

YOU MUST BE ABLE TO

-stand for long periods of time, climb, reach, stretch, grasp and bend a great deal;
-be neat in your working habits since much of the work is done in occupied homes;
-use arithmetic in estimating amounts of paper needed for rooms of various sizes with windows and doors of varying sizes.

D.O.T. 574.585-010

PREPARATION AND TRAINING:

Although it is not necessary, most employers prefer high school graduates.

RECOMMENDED HIGH SCHOOL COURSES:

Practical Geometry Mechanical Drawing Art Courses

A formal three-year apprenticeship is considered the best method of securing the necessary skill and experience for journeyman rating.

A substantial proportion of paperhangers have learned the trade informally working as an apprentice to experienced craftsworkers or by observing them or being taught by them. Workers without formal apprenticeship training have gained acceptance as journeymen more easily in this craft than in most of the other building trades. It should be noted that a trainee in this method is not assured of learning all phases of the trade or receiving fair wages while learning.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Growth in the employment of paperhangers is expected to result mainly from the anticipated increase in construction activity.
More widespread use of fabric, plastic and other types of wall coverings applied by paperhangers should contribute to the demand.
Because of wallpapers designed for easier application by "do-it-yourselfers", and because paint is being used for interior decoration in building in place of paper, the outlook for paperhangers may be reduced somewhat.

ADVANCEMENT

Paperhangers may advance to supervisors.
They may establish their own business as decorating contractors.
They may also advance to jobs as estimators for painting and decorating contractors--computing material requirements and labor costs.

MORE ABOUT THE JOB:

Paperhangers cover walls and usually ceilings of rooms with special paper manufactured for this purpose. They may remove old paper by stripping, soaking, steaming or scraping. They may fill and smooth cracks and prepare surfaces by coating and sizing to receive the paper.

Paperhangers measure and cut strips of paper, allowing for matching of the pattern. They mix a paste, apply it to the paper with a brush, and then place the pasted paper against the surface to be covered. They smooth the paper into place with a dry brush, trim edges overlapping baseboards with a trimmer, fit the paper around doors, windows and electric fixtures, and roll joints with a seam roller. They may also hang a border.

The paperhanger works from a raised board or a scaffold to reach ceilings and the upper parts of the walls.

Some paperhangers are also interior painters and paint those wall and ceiling areas of a room not covered with paper.

Paperhangers also hang vinyl, canvas and many new types of wall covering.

JOB CLUSTER #4
"Construction"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$10.30/per hour		

*A higher hourly wage is paid for those working at extreme heights.

For salary information in your area of the state, check with your local employment office or the appropriate local union office.

HOURS OF WORK

The majority of paperhangers who are union members and not self-employed work a forty-hour week with overtime pay for additional hours.

FRINGE BENEFITS

Most workers in this trade are in business for themselves.

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Employment Security Division
P. O. Box 1728
Helena, Montana 59601

Talk to a representative of your local Painters Union.

ADDITIONAL SOURCES OF INFORMATION:

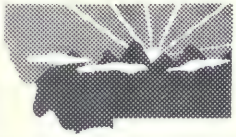
Your school counselor and librarian may also help you find additional information.

Write for "Apprenticeship Training Program"

National Joint Painting and Decorating
Apprenticeship and Training Committee
1925 K Street, N.W.
Suite 207
Washington, D.C. 20006

RELATED OCCUPATIONS:

JOB TITLE:	D.O.T.#:
Carpet Layer	864.481-010
Painter	840.381-010



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: PARK RANGER

PARK RANGERS are employed at national, state and municipal parks, historical sites and recreation areas. Their duties generally include studying, managing and protecting the area to which they are assigned and educating and assisting the visitors who make use of the facilities within these areas. In national parks, the title PARK RANGER now includes the occupations of park naturalist, historian and archaeologist.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Alert	Verbal	General good health
Friendly	Numerical	Full use of legs, arms, and hands
Able to deal with the public	Clerical	Good hearing and vision
Adaptable	Some mechanical	Stamina and endurance

YOU SHOULD KNOW THAT

-rangers and assistants must be continually alert in order to protect both the visiting public and the park
-you are not eligible if you have been convicted of a serious misdemeanor or any felony
-you must be at least 21 years old for most jobs
-rangers should possess a valid driver's license

YOU MUST BE ABLE TO

-live and work in relative isolation, usually far from cities
-perform strenuous physical work as a regular part of the job
-handle park visitors in large numbers using tact, patience, and consideration, but at the same time, firmly upholding the rules and regulations of the park
-as a beginning ranger, you perform many routine maintenance tasks on a regular basis

DOT 169.167-042

PREPARATION AND TRAINING:

High school graduation is a must for all jobs except some part-time summer work. State and federal park systems prefer four-year college graduates for ranger jobs.

RECOMMENDED HIGH SCHOOL COURSES: Sciences, Agriculture, Speech, English, Math

COURSE OF STUDY AFTER HIGH SCHOOL

- Park and recreation management
- Natural Science
- History
- Archaeology
- Police Science
- Sociology
- Administration
- Behavioral Sciences

The University of Montana, located in Missoula, has a school of forestry with information on required subjects to take.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITIES

Opportunities are found with national, state, and county park systems.
Competition for jobs is keen.
Opportunities are better for the worker with a four-year college degree in forestry.
Those with only a high school diploma will find far fewer opportunities, usually restricted to lower paying jobs with little chance of advancement.

OPPORTUNITIES FOR ADVANCEMENT

The worker with training and skill can advance into higher paying jobs and eventually into management of park systems.

MORE ABOUT THE JOB:

The park ranger serves as host, law enforcement officer and conservationalist at the many county, state and national parks.

Unlike the forester who manages open forest lands for commercial as well as recreational uses, the park ranger's job is primarily to control and protect land used exclusively for recreation.

The ranger's assignment depends on training and experience and the kind of park where employed. Duties vary, depending on the season of the year.

Park rangers may be required to do the following:

-during the season, the good weather months, the ranger is busy taking care of the visitors at the park
-he/she collects fees for entrance or use of facilities, assigns visitors to accommodations and gives information regarding rules
-he/she supervises extra help hired for seasonal work
-he/she interprets features of the park through lectures, native hikes or informal chats
-he/she assumes leadership in such emergency situations as search and rescue work, forest fires, or tending to injured visitors who require first aid treatment

At all times of the year, the ranger patrols the park to maintain law and order, ascertain the safety of roads and trails, check on fire hazards, and note evidence of plant disease or damage to wildlife.

JOB CLUSTER #1

"Agribusiness and Natural Resources"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40*	GS-5 $11,000-$14,300/annually GS-7 $13,650-$17,700/annually		

*Overtime may be required on holiday weekends, in case of emergency or fire.

HOURS OF WORK

Rangers work forty hours a week. Overtime is routine during busy seasons. Weekend hours are a regular part of the schedule.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

- Up to 30 days paid vacation
- Paid sick leave
- Paid holidays
- Group life insurance
- Health and welfare plans
- Overtime is compensated for having additional time off during slack seasons

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Talk to a Park Ranger in one of our National Parks for further details.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

The Conservation Directory, published annually by the
National Wildlife Federation
1412 Sixteenth Street, N.W.
Washington, D.C. 20006

National Park Service
U. S. Department of Interior
Washington, D.C. 20240

RELATED OCCUPATIONS:

JOB TITLE:	D.O.T.#:
Examiner, Tariff and Schedules	169.267-014
Fire Assistant	169.167-022
Interviewer and Claims Adjuster	166.167-010
Vocational Disability Examiner	047.107-042

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: PARKING ENFORCEMENT OFFICER

The PARKING ENFORCEMENT OFFICER works under supervision to patrol areas, to issue citations for parking meter overtime and zone violations, and to do related work as required. He/she usually drives a small motorized vehicle and may or may not be a member of the city police force.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Dependable	Verbal	Good general health
Honest	Clerical	Normal vision and hearing
Responsible	Some mechanical	Eye-hand coordination
Tactful	Finger dexterity	Normal speech
Well groomed		
Able to take orders		

YOU SHOULD KNOW THAT

- -You may be a member of a city police force or be a civilian parking officer employed by the city;
- -As a parking enforcement officer, you will have to deal with some upset motorists whose cars you find overparked;
- -You should be able to endure adverse weather conditions;
- -You should be able to walk.

YOU MUST BE ABLE TO

- -Develop a working knowledge of the vehicle code and various municipal ordinances regarding parking;
- -Learn, understand and explain the ordinances and regulations;
- -Deal effectively with the motoring public;
- -Work honestly and reliably without supervision.

D.O.T 375.587-010

PREPARATION AND TRAINING:

Most employers require that a candidate have a high school diploma and some require the candidate to have any combination of training and experience equal to high school graduation plus one year of experience dealing with the public.

RECOMMENDED HIGH SCHOOL COURSES

A general high school course of study is recommended.

ADDITIONAL FACTS ABOUT THE JOB

You will receive on-the-job supervised instruction upon employment. This usually consists of instruction in the office as well as making the rounds with an experienced parking enforcement officer. Some experience dealing with the public is preferred by most employers and required by some.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Competition for most jobs is fairly stiff.

There are usually several qualified applicants for each opening.

Turnover is moderate.

ADVANCEMENT

Advancement opportunities are fairly limited. In areas where the officer is a member of the police force, he/she can advance to higher rank and salary.

MORE ABOUT THE JOB:

The parking enforcement officer:

-May be a member of the city police force or he/she may be a civilian city employee;
-Usually must take a Civil Service examination;
-Is responsible for patrolling parking areas and enforcing parking ordinances;
-Uses mechanical, verbal and clerical aptitudes to perform the tasks required of the job.

Duties may include:

-Patrolling controlled parking areas including both on and off street parking;
-Observing instances of overtime parking;
-Issuing citations for meter and overtime violations;
-Operating a motorized vehicle to patrol areas;
-Listening to complaints regarding citations and referring persons to proper authority;
-Controlling paid parking areas;
-Keeping carbon copies of citations issued;
-Collecting coins from meters;
-Calling meter repairperson if meter does not function properly;
-Ticketing cars parked in no parking, loading or taxi and bus zones.

JOB CLUSTER #14
"Public Services"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$602-$801/mo	$700-$735/mo	$602/mo

Salaries may vary throughout the state. Check with a city official for accurate salary information for your area.

HOURS OF WORK
The parking enforcement officer works a standard forty-hour week. He/she may work some overtime, but generally works five days a week, eight hours a day.

FRINGE BENEFITS
Depending on place and length of employment you may receive the following:

retirement plan	life insurance	uniform allowance
medical coverage	paid vacation	overtime pay or compensating time off
paid holidays	disability protection	

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Check with your local law enforcement agency for further details.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

International Association of Chiefs of Police
1319 18th Street, NW
Washington, D.C. 20036

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Border Guard	375.363-010
Fingerprint Classifier	375.263-014
Police Officer	375.263-014

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: PARKING LOT ATTENDANT

The PARKING LOT ATTENDANT is responsible for the storage and safety of cars left in the parking lot in which he/she works.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Honest	Some mechanical	Normal good health
Friendly	Numerical	Good vision and hearing (natural or corrected)
Careful		Average eye-hand coordination
Courteous		Able to judge distances
Dependable		
Able to work alone		

YOU SHOULD KNOW THAT

-you must have a good driving record to qualify.
-you may be expected to be able to make very minor repairs and perform related duties.
-you must be friendly and courteous at all times with customers.

YOU MUST BE ABLE TO

-work quickly during rush hours while maintaining strict care in the handling of cars;
-drive all types of automobiles with better than average skill;
-handle all types of customers, many of whom will be rushed when you deal with them;
-perform simple arithmetic accurately in the process of accepting payments and making change.

DOT 915.473-010

PREPARATION AND TRAINING:

There are no set educational requirements for parking lot attendants. A high school education is not necessarily required for the parking lot attendant; however, many employers prefer to hire workers in this category. Training on-the-job is usually given the beginning attendant.

COURSE OF STUDY

High School: A vocationally oriented course is recommended. Especially recommended are classes in driver education and driver training.

ADDITIONAL FACTS ABOUT TRAINING

Your driving skill must include proficiency in operation of automobiles with standard transmissions as well as those with automatics. Before being hired as a parking lot attendant, you will be expected to actually demonstrate your driving skills for the employer. Many parking lot attendant jobs are held by students who work on a part-time basis while preparing for other vocations.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities for attendants are usually found in downtown areas of larger cities. Employment as an attendant is usually open to men but women are not excluded. Opportunities in the state of Montana are limited.

ADVANCEMENT

Attendants receive pay raises with time on a job.
A few parking lot attendants use their experience in the lot as training for other better paying jobs with car lots and other employers who require experience in auto handling.

MORE ABOUT THE JOB:

The parking lot attendant is basically responsible for parking cars in commercial parking lots. In order to park cars properly, the attendant must be skilled in several aspects of driving.

The attendant must be able to:
- operate all sizes and makes of cars;
- operate cars having manual as well as automatic transmissions;
- perform all the backing up operations required for handling cars in tight places.

In addition to actually parking cars, the attendant has other standard responsibilities which include:

- accepting payment and making change for customers;
- dispensing claim checks to customers;
- assisting customers in and out of cars.

Attendants may also:

- wash and wipe car windows;
- perform minor operations on cars or suggest remedies when unable to help.

Attendants who work in multi-level lots where customers drive their own cars to parking places will likely work in a small office at the entrance to the lot where they will spend a great majority of the time dispensing tickets to entering customers and taking payment as they leave.

JOB CLUSTER # 14
"Public Services"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
48-54	$3.20-$4.40/hr	$3.30-$3.50/hr	$3.20/hr

Tips, which are common in this occupation, can boost regular earnings substantially.

HOURS OF WORK

Attendants often work long hours. Night and weekend work is common.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

- paid vacations
- paid sick leave
- health insurance
- welfare plan

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

The Employment Service helps many young people find jobs.
You may contact a youth representative at your local Employment Service Office.

ADDITIONAL SOURCES OF INFORMATION:

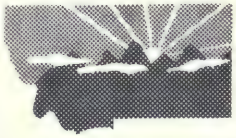
Your school counselor and librarian may also help you find additional information

Your school counselor and librarian may also help you find additional information.

National Parking Association
1101 17th Street NW
Washington, DC 20036

RELATED OCCUPATIONS:

JOB TITLE:	D.O.T.#:
Tire-Service Supervisor	915.134-010
Car-Wash Supervisor	915.137-010
Service Station Attendant	915.467-010



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: PATTERNMAKER

The PATTERNMAKER makes a master pattern from the approved sketches and designs of the professional designer.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Creative	Numerical	Good eyesight (natural or corrected)
Stable	Verbal	Good general health
Precise		Good form perception
Careful		Average motor coordination
Attention to detail		

YOU SHOULD KNOW THAT

- Workers with physical handicaps which do not hamper ability to do the work may qualify;
- Turnover is small due to limited numbers employed;
- Most pattern workers work on an hourly basis.

YOU MUST BE ABLE TO:

- Use mathematics up to and including higher mathematics;
- Follow written and oral directions;
- See completed garment in the mind's eye;
- Work closely with designers;
- Work accurately while under pressure;
- Work long hours giving attention to fine details;
- Work from sketches.

DOT 781.381-026

PREPARATION AND TRAINING:

High school graduation is required. Most employers require evidence of successful post high school education. Many employers prefer to hire experienced workers.

COURSE OF STUDY INCLUDES:

Basic high school education
Two years of mathematics
Two years of mechanical drawing or its equivalent

ADDITIONAL FACTS ABOUT TRAINING

A patternmaker is the person who makes the real item from the designer's ideas. The patternmaker is highly skilled and will find it easier to get a job with advanced education. In smaller shops, the patternmaker may also act as designer.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Jobs will be offered to those in the industry who show the talent and have the ability to become patternmakers.

Opportunities exist principally in large urban areas where clothing is manufactured.

Opportunities in Montana are very limited.

ADVANCEMENT

For the highly creative person, advancement can be from patternmaker to designer if the person is willing to continue his or her education, in the field of design.

In a large shop, patternmakers may be promoted to foremen.

MORE ABOUT THE JOB:

The sample sketch or design that has been approved by the manufacturer is sent to the patternmaker who constructs the full size pattern.

Working closely with the designer, the patternmaker translates the sketch or sample garment into paper or fiberboard pieces that are used as guides for cutting fabrics.

In drawing and cutting the pattern pieces, the patternmaker must make allowances for pleats, tucks, seams, yokes, and shrinkage.

The patternmaker must be able to use drafting instruments, rulers, and such tools. Ability to use both geometry and trigonometry is advantageous to the job.

The patternmaker assists in making the patterns for various sizes put together by the pattern grader.

JOB CLUSTER #10
"Manufacturing"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$4.00-$5.69/hr	$4.75-$5.20/hr	$4.00/hr

HOURS OF WORK
Normal workweek is forty hours. Overtime may be required in time of design and style change.

FRINGE BENEFITS
Depending on length and place of employment, you may receive:

- paid vacation
- employer paid life insurance
- paid holidays
- employer paid group health plan
- retirement plan

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Amalgamated Clothing Workers of America
15 Union Square
New York, New York 10003

United Garment Workers of America
31 Union Square
New York, New York 10003

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Designer and Template Maker	781.381-014
Furniture Upholsterer	780.681-010
Sail Cutter	781.384-018

D.O.T. Fourth Edition, page 775

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB:

PBX OPERATOR
(D.O.T. TELEPHONE OPERATOR)

PBX OPERATORS use telephone switchboards to receive incoming and interoffice phone calls. They relay calls to the proper people in an office. They may also place long distance calls for other employees.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Tactful	Clerical	Normal sight and hearing
Courteous	Verbal	No speech impediments
Patient		Good eye-hand coordination
Initiative		Finger dexterity
Neat		
Well-groomed		

YOU SHOULD KNOW THAT

- -The PBX operator may handle all outgoing calls through her/his dialing and switchboard equipment, or in many instances, the equipment is installed so outside calls may be made from individual offices rather than going through the operator;
- -Other clerical duties may be asked of the PBX operator;
- -Most employers insist on good grooming;
- -You must be willing to spend most of the day at a station or desk with little vatiation in routine.

YOU MUST BE ABLE TO

- -Be calm and polite even with unpleasant callers;
- -Use your hands, fingers, and arms for a considerable amount of time during the day;
- -Perform other clerical duties such as typing,sorting mail, and acting as receptionist.

DOT 235.662-022

PREPARATION AND TRAINING:

High school graduation is almost always required. Some companies will accept the equivalence of the diploma or experience in similar work.

RECOMMENDED HIGH SCHOOL SUBJECTS:

Typing	Business Principles
Business Math	English
Filing	Business Machines

ADDITIONAL FACTS ABOUT TRAINING:

Many large firms have part-time jobs for PBX operators. You may be able to get on-the-job training while still going to school.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Most opportunities exist with large businesses in industrial firms.

The best opportunities will exist for those who can perform other duties to supplement the work on the switchboard.

The demand for PBX operators throughout Montana is stable.

ADVANCEMENT

An experienced PBX operator may be promoted to a supervisor or chief operator in a large firm.

In small businesses, however, the opportunities for advancement are limited.

MORE ABOUT THE JOB:

The PBX operator answers telephone calls in large institutions and routes them to the proper extension.

She/he must be alert to lights that indicate incoming calls, outgoing calls and inter-office calls.

She/he responds by opening the talking key and plugging the appropriate cords into the phone jack.

She/he determines to which extension the call is being placed and then connects another jack. When the call is complete, a light signals her/him to remove both incoming call and destination jacks.

On outgoing calls, the PBX operator may find the number to be called, dial direct, or get the assistance of a long distance operator and then stay on the line until she/he is sure the call is complete.

She/he may keep records of outgoing calls and take messages for persons who are not in the office when called.

In smaller businesses, the PBX operator may perform other secretarial and clerical duties such as receiving visitors, issuing visitor passes, maintaining records, general typing, proofreading, mail sorting, providing general information, especially when the PBX duties are minimal. Often a public address system is coupled with the PBX board such as in a hospital.

JOB CLUSTER #3
"Communications and Media"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	35-40	$4.31-$7.25/hr	$5.00-$6.24/hr	$4.31/hr

Salaries may vary throughout the state. A local source should be checked for accurate salary information in your area.

HOURS OF WORK
The forty-hour week is standard although many companies now have thirty-five hours per week. Some companies are open twenty-four hours a day and have three shifts.

FRINGE BENEFITS
Depending on length and place of employment, you may receive:

insurance plan	paid holidays	pension plan
paid vacation	health insurance	

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Private Switchboard Operators
Science Research Associates
259 East Erie Street
Chicago, Illinois

Communications Workers of America
1925 K Street, N.W.
Washington, D.C. 20006

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Central-Office Operator	235.462-010
Directory Assistance Operator	235.662-018
Telephone-Answering-Service	235.662-026

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: PEDIATRICIAN

The PEDIATRICIAN is a medical specialist who plans and carries out a medical care program for children from birth through adolescence. He/she aids in the mental and physical development and diagnosis and treats diseases.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Mature	Verbal	Good health
Dependable	Scientific	Normal vision & hearing
Mentally alert	Numerical	Free from communicable disease
Emotionally stable	Intelligent	Eye-hand coordination
Accurate		Finger dexterity
Able to work under pressure		

YOU SHOULD KNOW THAT

-The pediatrician is a specialized M.D. and must serve three to four years residency after completing medical school and internship training. This means up to thirteen years in school after high school.
-Working conditions in hospitals, clinics, and private offices are generally comfortable and safe.
-Hazards of the job include exposure to disease.

YOU MUST BE ABLE TO

-Work extremely well under pressure, always remembering that the health or sickness, and in some cases, life or death of a patient is your responsibility.
-Tolerate the sight of sickness, blood, and wounds.
-Pass state examinations to qualify to practice pediatrics.
-Inspire the confidence and trust of patients and their parents.

DOT 070.101-066

PREPARATION AND TRAINING:

The pediatrician must meet the following educational and training requirements:

-graduation from high school;
-completion of a four-year college course;
-four years at an accredited medical school;
-one year internship;
-three to four years residency;
-after meeting these requirements, additional state examinations must be passed.

HIGH SCHOOL SUBJECTS: College preparatory.

COLLEGE COURSES: The candidate should major in one of the following areas: physiology, biology, organic or inorganic chemistry, and should follow an approved pre-med course of study.

MEDICAL SCHOOL: A fully prescribed program includes studies in:

anatomy	biochemistry	physiology
psychiatry	opthamology	urology
microbiology	neurology	obstetrics
gynecology	pathology	pharmacology

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITIES

-As in other areas of the medical profession, there is a shortage of well-trained pediatricians.
-Opportunities for employment are good and are expected to remain so in future years.

OPPORTUNITIES FOR ADVANCEMENT

Advancement opportunities normally take the form of larger and more lucrative practices as the pediatrician becomes established and experienced.

MORE ABOUT THE JOB:

The pediatrician:
- -is a general M.D. who has received additional training (3 to 4 years) in diseases and treatment of children and adolescents;
- -plans and carries out medical care programs of children from birth through adolescence to aid in mental and physical development;
- -examines patients to determine origin and cause of disease and to establish preventive health plans;
- -treats patient and refers him or her to another specialist;
- -ascertains nature and extent of injuries;
- -prescribes medicines and/or treatments;
- -uses a variety of medical instruments as listed below:

stethescope	scales	thermometer
reflex hammers	tongue depressor	sphygmomanometer (blood pressure gauge)
hypodermic syringe	otoscope	

The pediatrician must have a thorough knowledge of medical terminology, procedures, instruments, and bodily structure, functioning, development, and diseases.

JOB CLUSTER #8
"Health"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$40,000 annual (medium)		

The pediatrician is usually paid on a per patient basis unless employed by a hospital in which case they may be paid on a flat salary basis.

HOURS OF WORK

Hours of work vary considerably and are generally quite irregular. The pediatrician usually has office hours from 9 a.m. to 5 p.m. but also remains on emergency call 24 hours a day. This means they may work up to fifty hours or more a week.

FRINGE BENEFITS

Benefits may include:

-life insurance	-retirement plan	-vacation
-health coverage	-sick leave	-holidays

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Talk to a local pediatrician for more details.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Council on Medical Education
American Medical Association
535 North Dearborn Street
Chicago, Illinois 60610

RELATED OCCUPATIONS:

There are 32 A.M.A. recognized fields of specialization for physicians in the medical profession. Some of the specialists are:

JOB TITLE	D.O.T.#
Anesthesiologist	070.101-010
Cardiologist	070.101-014
General Practitioner	070.010-022
Psychiatrist	070.107-014
Obstetrics	070.101-054

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: PERSONNEL MANAGER

PERSONNEL MANAGERS interview job applicants. They also test applicants, investigate their background, and/or weigh the qualifications of several applicants against each other to determine which one should get a job. Most large businesses, industries, and government agencies have a personnel administrator or personnel manager.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Patient	Verbal	Normal health
Pleasant personality	Numerical	Normal vision & hearing (natural or corrected)
Well groomed	Clerical	Normal use of hands, fingers, arms & legs
Accurate		
Precise		
Able to make judgements		
Prefer working with people		

YOU SHOULD KNOW THAT

- -Personnel managers, at times, work under considerable pressure of deadlines and organizational requirements for employment needs;
- -Working conditions are usually safe, indoors, and comfortable;
- -Little physical strain is involved;
- -A four-year college degree provides the best entry qualifications.

YOU MUST BE ABLE TO

- -Communicate well verbally in interview and other siuations, and have the ability to help others relax and communicate effectively when they are nervous;
- -Make difficult judgements and decisions affecting others on the basis of organizational requirements of your employer;
- -Work well as part of a team.

DOT 166.117-018

PREPARATION AND TRAINING:

To be well qualified for an entry level job, you should have a degree from a four-year college or university. You can qualify with less than a four-year degree with some sub-professional work in personnel or a related field.

COURSE OF STUDY INCLUDES:

High School: Recommended is a college preparatory program including math, science, a foreign language, and public speaking related subjects.

College or University: A major in personnel administration, industrial relations, business administration, public administration, psychology, or other majors related to the business field.

ADDITIONAL FACTS ABOUT TRAINING

Extracurricular activities such as club participation, athletics, and others are beneficial for helping the student interested in personnel work develop necessary skills in leadership and organizational participation.

Some jobs may require college or university graduate training, a master's degree in administration, or a related field. The student who completes training to this level will be exceptionally well qualified to enter the personnel field in better than average positions.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Most jobs for personnel managers are found in the larger cities where government and business offices are numerous.

There are more applicants than jobs available throughout the state.

ADVANCEMENT

Personnel managers with large businesses and government agencies may move up within their organization to positions of great responsibility involving policy decisions affecting a wide range of problems.

Competition for top level jobs with large private and public organizations may be intense and only the most successful workers will achieve this level.

MORE ABOUT THE JOB:

The scope of activities and responsibility of the personnel manager depends on the size of his/her organization. In a small organization, the personnel manager is likely to handle all or nearly all personnel functions. In larger agencies, the manager will more likely work on a few specialized jobs moving from time to time to different areas of specialization until he/she learns all phases of the work.

Some tasks performed by personnel managers include:

-Interviewing and evaluating applicants for entry and promotional positions;
-Assisting in individual and union wage and benefits negotiations;
-Designing and conducting safety campaigns;
-Advising management and assisting in the formulation of basic personnel policies;
-Designing recruiting materials and managing recruiting campaigns;
-Preparing reports and initiating and answering correspondence;
-Handling fringe benefit programs.

Trainees in programs leading to jobs as personnel managers and others who have not attained proficiency in the field will assist experienced administrators in the above mentioned duties advancing to more responsible duties as they gain experience.

JOB CLUSTER #2
"Business and Office"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$12,000-$23,600/yr	$15,000-$18,000/yr	$12,000/yr

Because of varying rates of pay throughout Montana, specific information on salaries may be obtained at your nearby employment office.

HOURS OF WORK

Most personnel managers work a standard five-day, forty-hour week. Overtime is not common, but may occur in emergencies.

FRINGE BENEFITS
Depending on length and place of employment, you may receive the following:

paid vacations	sick leave	paid holidays
retirement plans	health insurance	group life insurance
bonuses	profit sharing plans	

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

American Society for Personnel Administration
52 East Bridge Street
Berea, Ohio 44017

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Manager, Educational	166.167-026
Director, Industrial Relations	166.117-010
Manager, Labor Relations	166.167-034

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MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: PHARMACIST

A PHARMACIST buys and dispenses thousands of medications, in various forms, that have been prescribed by physicians, dentists, and veterinarians. Pharmacists also handle syringes and hypodermic needles. They may even supply technical information on pharmaceutical items to other health practitioners.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Enjoy meeting people	Numerical	Good physical health
Friendly and pleasant	Scientific	Normal vision & hearing (natural or corrected)
Precise	Clerical	Good color perception
Neat in appearance		Good sense of smell
Reliable		Good eye-hand coordination

YOU SHOULD KNOW THAT

-A minimum of five years post high school training and a state license are required to practice as a pharmacist.
-Working conditions for pharmacists are normally safe, indoors, and most pharmacies are well lighted and pleasant.
-The fully qualified pharmacist can normally find good paying work in any area.

YOU MUST BE ABLE TO

-Work for long periods of time standing in one position.
-Measure and blend substances in exact proportions in small quantities without error.
-Learn and use difficult principles of chemistry and related sciences requiring years of study to master.
-Work well under pressure in cases of emergencies.
-Supervise the work of others.

DOT 074.161-010

PREPARATION AND TRAINING:

The pharmacist must complete a program requiring at least five years of post high school training divided between pre-pharmacy training and professional training taken at an accredited school of pharmacy. Following the completion of training, they must pass an examination and be granted a license to practice.

COURSE OF STUDY INCLUDES:

High School: A college preparatory program is necessary. Math, a foreign language, and sciences, particularly chemistry, are recommended.

Pre-Pharmacy: Chemistry and other sciences are emphasized.

ADDITIONAL FACTS ABOUT TRAINING:

The University of Montana, located in Missoula, has a school of pharmacy. There are numerous professional pharmacy schools in other states. Your counselor can provide information on such schools.

The minimum requirement for entry into the profession is graduation from an accredited pharmacy college. Following graduation, the State Board examination must be passed before the license is obtained. Five years of college is necessary to become a pharmacist.

PROSPECTS AND OPPORTUNITIES:

JOB AVAILABILITY TRENDS

Opportunities for pharmacists will remain good.

ADVANCEMENT

Opportunities for advancement are good. One may become self-employed, or one may get regular promotions on-the-job.

MORE ABOUT THE JOB:

The vast majority of pharmacists work in retail drugstores or professional pharmacies. Their principal duties and tasks include:

-taking prescriptions from physicians and dentists;
-filling the order and dispensing drugs to customers as well as providing instructions on their proper use;
-compounding (mixing) prescription medicines from ingredients when such prescriptions are not in ready-made form from the manufacturers;
-categorizing and stocking new drugs and other medicines as they arrive from the manufacturers;
-advising physicians, dentists, and others of new drugs and other medicines in terms of uses, abuses, side effects, and other aspects;
-keeping special records on narcotic medicines and poison in accordance with the law.

Pharmacists who work in hospitals spend more time compounding basic medicines for use in the hospital and act as advisors to hospital staff on availability and uses of new medicines as they are introduced.

Research pharmacists work with development, testing and evaluation of medicine.

JOB CLUSTER #8
"Health"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$8.95-$10.80/hr.		$8.95/hr.

Because of varying rates of pay throughout Montana, specific information on salaries may be obtained at your nearby employment office or hospital.

HOURS OF WORK

Pharmacists working in retail pharmacies usually work forty to forty-eight hours weekly and may regularly work on Saturday with a day off during the week. In government hospitals the forty hour week is standard.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

-paid vacation
-retirement plan
-paid holidays
-sick leave
-group life and health insurance

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Talk to a local pharmacist for further details.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

American Pharmaceutical Association
2215 Constitution Avenue, N. W.
Washington, D. C. 20037

American Council on Pharmaceutical Education
77 West Washington St.
Chicago, Illinois 60602

National Association of Retail Druggists
1 East Wacker Drive
Chicago, Illinois 60601

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Pharmacy Helper	074.161-010

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: PHARMACY HELPER

The PHARMACY HELPER works under the supervision of a registered pharmacist and performs routine duties in the hospital or clinic pharmacy.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Cooperative	Scientific	Normal vision and hearing (natural or corrected)
Courteous	Verbal	Good color perception
Responsible	Numerical	Good general health
Initiative	Clerical	Physical stamina
Orderly work habits		

YOU SHOULD KNOW THAT

You won't qualify if:

- -you have an active communicable disease;
- -you have a police record for a criminal offense, particularly undersirable, anything to do with narcotics;
- -you have a physical handicap that would affect job performance (i.e., uncontrolled epilepsy, color blindness);
- -you cannot tolerate chemical odors or working in close quarters.

YOU MUST BE ABLE TO

- -Perform routine monotonous tasks on a continuous basis
- -Follow directions quickly and accurately (both written and spoken)
- -Assume limited responsibility for your work
- -Stand and walk throughout most of the working day
- -Handle and manipulate chemical equipment and glassware.

DOT 074.387-010

PREPARATION AND TRAINING:

The pharmacy helper is expected to have a high school education which should include courses in general science and chemistry. A brief on-the-job training is usually provided.

ADDITIONAL FACTS ABOUT TRAINING

This is an entry occupation. Training can be secured on the job. Students working in pre-medical, pre-dental, and pre-pharmacy programs often will work part-time as pharmacy helpers.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITIES

Job opportunities are limited. This is not a demand occupation.
Most jobs are found in pharmacies attached to large hospitals or medical clinics.
Often, the job is only part-time.

OPPORTUNITIES FOR ADVANCEMENT

The position of pharmacy helper is not a career position.
There is no formal line of promotion.

MORE ABOUT THE JOB:

The pharmacy helper performs routine duties in the pharmacy under the close supervision of a registered pharmacist. General duties will include receiving, unpacking, checking, and sorting of supplies.

In hospitals, typical tasks include:

- -running errands
- -filling orders
- -keeping work area clean and orderly
- -washing bottles and glassware
- -maintaining record of purchases
- -filling non-medical orders (i.e., tooth paste)

May under direct and close supervision, assist in:

- -labeling bottles;
- -preparing orders.

Pharmacy helpers may be employed in pharmacies attached to large medical clinics. The job will include those tasks performed in the hospital and in addition, answering the telephone and delivery.

Doctor's offices, small clinics, and public health agencies do not employ pharmacy helpers.

JOB CLUSTER #8
"health"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	15-40	$3.50-$4.30/hr.		$3.50/hr.

Many pharmacy helpers are part-time workers attending college. Wages of full-time workers may be slightly higher than the rates indicate.

HOURS OF WORK

Depending on the job, you may work part-time or a forty-hour workweek. You will be expected to work holidays and weekends if called upon to do so.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

- -health insurance
- -retirement plan
- -paid vacations and holidays

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Pre-med or pre-pharmacy students who are interested in this occupation are encouraged to contact the local pharmacies to inquire about the prospects of obtaining such a position.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

American Society of Hospital Pharmacists
2215 Constitution Avenue, NW
Washington, D.C.

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Pharmacist	074.161-010
Pharmacist Assistant (Military)	074.381-010

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: PHOTOGRAPHER, STILL

PHOTOGRAPHERS, using a variety of cameras, take pictures that may be used for portrait, commercial, or industrial purposes. Photography is both an artistic and technical occupation.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Original	Artistic	Normal vision and hearing (natural or corrected)
Imaginative	Mechanical	Full use of arms and legs
Pleasant personality	Numerical	Color discrimination
Perceptive	Some clerical	Able to stand, bend and crouch
Persuasive		
Precise		
Patient		
Persistent		

YOU SHOULD KNOW THAT

- -Many photographers are self-employed;
- -Those who work for others must meet the employment standards of their employer which may include a physical examination or security screening;
- -In addition to being an occupation, photography is often one of the skills required on other jobs.

YOU MUST BE ABLE TO

- -Adapt to the working conditions required by the type of photography you select;
- -Work skillfully with delicate and expensive equipment;
- -Work around the chemicals used on photography;
- -Read and carry out complex printed instructions;
- -Deal with people.

DOT 143.062-030

PREPARATION AND TRAINING:

For the better jobs, post high school training is usually necessary. Many successful photographers are photo-hobbyists and much of their skill has to be self-taught through trial and error and repetition as well as study.

RECOMMENDED HIGH SCHOOL COURSES

- Art
- Mathematics
- Chemistry
- Physics
- Geometry
- Basic Business
- College preparatory courses

The uses of photography are widely varied and multiply each year. Aside from pictures of people and places for art, the industrial and scientific applications of photography are mushrooming.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

The projected opportunities in Montana indicate that for the years 1980-90, the industry will exapnd. There is usually a demand for experienced photographers.

ADVANCEMENT

The photographer who begins as an assistant or an apprentice can expect increases in pay as he/she becomes more competent.

There is no formal line of promotion for a photographer.

MORE ABOUT THE JOB:

Approximately half of the photographers employed in the country work in portrait or commercial studios. Many are in business for themselves and the rest are employed as salaried employees for government agencies, industry, newspapers and magazines.

Specific duties of a commercial photographer include the following:

- arranging equipment
- adjusting camera
- moving objects
- mixing solutions
- loading film
- enlarging and reducing prints

Equipment used by photographers include the following:

- camera
- lights
- screens
- backdrops

Some photographic specialties include:

- -Photojournalism;
- -Illustrative photography;
- -Aerial photography;
- -Educational photography;
- -Instrumentation photography;
- -Space photography.

JOB CLUSTER #3
"Communications and Media"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$150-$435/wk	$175-$275/wk	$150/wk

Salaries vary widely depending on skills. Some top free lance photographers may make $1,000 or more for a single picture and as low as $5.00.

HOURS OF WORK
Hours depend on the type of photography. News camera operators, police photographers and television camera operators work any hour of the day or night.

FRINGE BENEFITS
Depending on place and length of employment, you may receive the following:

- paid sick leave
- paid holidays
- health insurance
- retirement benefits
- paid vacation

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

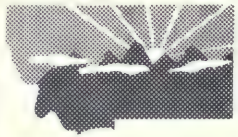
ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Professional Photographers of America, Inc.
1090 Executive Way
Oak Leaf Commons
Des Plains, IL 60018

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Camera Operators (radio and TV)	143.062-010
Darkroom Worker	976.681-010
Finish Photographer	143.457-010
Biological Photographer	143.362-010



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: PHOTOGRAPHIC RETOUCH ARTIST

Retouching photographs is a skill found among a group of highly specilized artists working primarily in the field of publishing, advertising, and portrait photography.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Stable	Artistic	Visual acuity
Cooperative	Finger dexterity	Full use of fingers
Precise	Manual dexterity	
Accurate		

YOU SHOULD KNOW THAT

- -People with some physical handicaps are capable of being retouch artists;
- -Many retouch artists work on a free lance basis; others work for large companies dealing with all phases of commercial art;
- -The retouch artist's success will depend upon not only his/her skill, but also his/her knowledge of processes and equipment and the uses of each.

YOU MUST BE ABLE TO

- -Visualize three-dimensional forms and arrangements;
- -Observe differences in such qualities as form, color, texture, and tone;
- -Acquire a skill necessary to handle the equipment;
- -Coordinate your own ideas with those of your client so that the results will be mutually satisfactory.

DOT 970.281-018

PREPARATION AND TRAINING:

It is possible for an extremely proficient beginner to enter the retouching field immediately after completing high school.

He/she will receive specific training on-the-job and advancement will depend entirely on talent and skill and skill with tools.

For those who wish to excel as retouch artists, two to four years training in an art school or in an art department of a university will provide sufficient background.

Familiarity with all the tools in the field and concentration on commercial art and photography are stressed in these courses.

Because a phase of retouching is connected with commercial art, the skill may be combined with other artistic techniques to produce an artist of many talents.

Part-time work will offer the prospective photographic retouch artist an opportunity to evaluate his/her own talent and at the same time acquaint himself/herself with the methods by which both negatives and prints are improved.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

A talented retouch artist should not have much of a problem finding a job.

Jobs are available in advertising, commercial art and portrait photography.

ADVANCEMENT

Advancement may be limited except by way of larger salaries or to a supervisory position.

An extremely proficient retouch artist may want to work on a free lance basis which makes him/her their own boss.

MORE ABOUT THE JOB:

The retouch artist must improve a finished product making the correction on either the negative or actual print itself; his/her decision is based upon each individual product and the results desired.

The first responsibility of the retouch artist is to determine correction to be made. He/she must be able to detect mechanical defects such as lint marks, pin holes, finger prints and scratches. Processing errors such as overdevelopment and under exposure must also be recognized before the actual correcting procedures are introduced.

The retouch artist who works primarily with negatives must determine whether the corrections are to be made chemically or on dry film. Underdeveloped negatives can be intensified chemically to produce a considerably improved picture.

In the field of portrait photography, the retouch artist must be concerned in most cases with dry negatives. He/she must be familiar with methods involving the use of utensils, dyes and etching tools. He/she must recognize that an angle at which light strikes the face can and does alter the size and shape of the features and he/she should understand the methods by which structural and physical changes can be made. To enhance a portrait, the artist may wish to blot out a background or alter particular details.

Before the retoucher can begin work on the actual print, he/she must be thoroughly acquainted with the grade of paper, surface structure and finish. These characteristics will have a bearing on the materials and techniques he/she will select to make his/her corrections.

JOB CLUSTER #7
"Arts and Humanities"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$135-$235/wk	$155-$215/wk	$135/wk

Salaries may vary throughout the state. A local source should be checked for current information in your area.

HOURS OF WORK

One who works for a company will have a fairly regular schedule, eight hours a day five days a week. The free lance photographic retouch artist will, of course, determine his/her own hours.

FRINGE BENEFITS

Depending on place and length of employment, you may receive the following:

paid vacations group insurance plan paid holidays

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Talk to a retouch artist at a local photography studio.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information.

Retouching and Finishing for Photographers by J. Spencer Adamson

This book can usually be found in the public library.

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Airbrush Artist	970.281-010
Delineator (renderer)	970.281-014
Form Designer (printer and publisher)	970.361-010

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: PHOTOJOURNALIST

The PHOTOJOURNALIST is a doubly talented person, successfully combining the functions of a photographer and a newspaper reporter.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Persuasive	Artistic aptitudes	Good health
Devious, yet considerate	Verbal facility (oral and written)	Physical stamina
Alert	Special photographic skill	Full use of arms and legs
Agreeable	Spatial and form perception	Good eyesight
Keenly interested in photography and journalism		Color discrimination
Imaginative		Manual dexterity
Original		Finger dexterity

YOU SHOULD KNOW THAT

-good photojournalists are so dissatisfied with stereotype pictures that they work to experiment and develop the unusual in the way of photographs.
-they are considerate of people who are the subject but at the same time may have to be persuasive or devious to capture the pictures wanted.
-successful photojournalists must be such highly practiced photographers that they can use their cameras almost as easily as they use their own hands.
-they have writing ability as well, this is a valuable asset.
-work is never dull or routine; they live a much more adventuresome life than the average person does, particularly if they are doing news work.

YOU MUST BE ABLE TO

-take pictures that are both technically excellent and newsworthy
-accept directions from your editors in an agreeable spirit
-know your camera so thoroughly that you can snap a picture in a reflex action
-develop, print and enlarge the pictures you take.

D.O.T. 143.062-034

PREPARATION AND TRAINING:

The aspirant to this career can engage in many activities during his or her high school years to measure his/her interest and ability as well as to acquire valuable experience. He/she should join any school or community photography club available, and work on a school newspaper or yearbook.

The amateur photographer should build and operate his/her own darkroom for developing, enlarging, and printing.

VALUABLE HIGH SCHOOL COURSES INCLUDE:

-art	-history	-English
-journalism	-social studies	-foreign languages

The photojournalist must be a high school graduate. Although a college degree is not an absolute requirement for admission to this field, many newspapers and other organizations give preference to college graduates when hiring.

Competition for this occupation is very keen and only those with formal training in journalism are likely to find employment.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Television's use of pictures to present the news has brought serious competition to the printed news media. Many newspapers have introduced color photos to help meet the threat of television; and newspapers and magazines are expected to increase their use of pictures. However, the television industry also uses photojournalists in their media.
The outlook for able photojournalists is bright, even though beginners will find competition very keen.
Both men and women are hired as photojournalists.

ADVANCEMENT

The able photojournalist may advance in several directions; one might be to work on a free lance basis at higher earnings or advancement may come by way of being promoted within the newspaper or broadcast business to a supervisory position or to an editor's job.

MORE ABOUT THE JOB:

The photojournalist takes pictures of news events, people, and objects for use in illustrating news stories and articles. He/she must travel to an assigned location to take pictures. He/she generally uses one type of camera rather than several. When he/she has completed taking the photographs at the assigned location, he/she returns the exposed plates or film to the newspaper or magazine office. He/she usually develops the negatives and makes prints of the pictures. For television use, he/she develops slides or footage.

The photojournalist maintains a file of negatives or pictures for future use in case the subjects of the pictures again become newsworthy.

Most newspaper and magazine photographers use more than one kind of camera; they shoot the same scenes with different cameras, using different kinds of film and trying to achieve different effects.

A newspaper or public relations agency may have a small studio and pose people there for "mug shots"- head and shoulder shots used widely in newspapers.

He/she does not necessarily have to be able to write the copy that accompanies his/her picture, although this is a very useful skill.

JOB CLUSTER # 13

"Communication and Media"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$180-400/wk	varies	Approx. $180/wk

Some photographers can add a minimal amount to their income by selling pictures to news bureaus.

Some of the major national magazines pay their top photographers $25,000 a year and more.

HOURS OF WORK

The normal workweek is forty hours. If an assignment forces him/her to work outside his/her regular hours, he/she usually gets compensatory time off.

FRINGE BENEFITS

Depending on the length and place of employment, a photojournalist may receive:

- -paid holidays
- -vacations
- -sick leave
- -life insurance
- -health insurance
- -retirement plan

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Talk to a personnel manager and/or photojournalist at a local newspaper, television station, or advertising agency.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information.

The Professional Photographers of America, Inc.
152 West Wisconsin Avenue
Milwaukee, Wisconsin 53203
(offers a partial list of schools of photography and a free booklet entitled "Photography as a Career")

Careers in Photography
Public Relations Department
Rochester Institute of Technology
65 Plymouth Avenue
Rochester, N.Y. 14608

RELATED OCCUPATIONS:

JOB TITLE:	D.O.T.#
Camera operator (radio and TV broadcasting)	976.382-010
Camera operator (motion picture)	143.062-022
Photographer, Portrait (profess. & kin.)	143.062-022
Screen Reporter (motion pic.; radio and TV broadcasting)	131.267-018

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MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: PHYSICAL THERAPIST (PT)

PHYSICAL THERAPISTS help persons with muscle, nerve, joint or bone diseases and injuries to overcome their disabilities. Following physician instructions, they treat a variety of disorders through therapeutic exercises, the use of mechanical apparatus and applications of massage, heat, light, water or electricity. Most of their patients are accident victims, crippled children and disabled older persons.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Patient	Intelligent	Good general health
Tactful	Verbal	Physical endurance and strength
Resourceful	Enjoy work	Free from communicable disease
Emotionally stable	Manual dexterity	Normal vision and hearing (natural or corrected)
Enthusiastic	Finger dexterity	
Understanding		
Happy		

YOU SHOULD KNOW THAT

-A PT must be licensed and a degree or certificate from a school of physical therapy is necessary before taking the state board examination.
-Working conditions are safe, indoors, usually in a hospital or similar institution.
-Physical therapy is a growing profession, but the number of therapists are not now nor will they be large enough to meet future needs.
-There are job opportunities in teaching, research, administration and miscellaneous specialities.

YOU MUST BE ABLE TO

-Work with people of all ages and with many kinds of handicaps and infirmities cheerfully and with enthusiasm;
-Work while standing and sitting and use your arms, hands and fingers constantly;
-Write reports of the results of your treatment.
-Follow instructions explicitly and assume responsibility for your work;
-Exercise good judgment and common sense.

DOT 076.121-014

PREPARATION AND TRAINING:

Most approved schools of physical therapy offer bachelor's degree programs. A number of schools accept those who already have bachelor's degrees and give a 12-16 month course leading to a certificate in physical therapy. Some schools offer both a bachelor's degree and a certificate program.

COURSE OF STUDY INCLUDES:

High School: A college preparatory major is recommended. The program should include math, a foreign language and science, including a laboratory class. Social science, communication classes and humanity classes are also helpful.

College or University: Some colleges and universities offer an undergraduate major in physical therapy, the completion of which will qualify you for entry into the field. Others offer a graduate program for those with undergraduate majors not in physical therapy which will qualify the student for entry.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITIES

-Opportunities for physical therapists are good in hospitals, clinics and public health facilities.
-Opportunities are good for men and women in this field; shortages expected to continue to assure jobs to all who are qualified. Greatest need is in the metropolitan areas.

OPPORTUNITIES FOR ADVANCEMENT

A graduate degree, combined with clinical experience, increases the opportunities for advancement to positions of responsibility in teaching, research and administration as well as in the treatment area of physical therapy.

MORE ABOUT THE JOB:

Working in hospitals, clinics, schools for handicapped children, and in similar facilities; physical therapists, on the instructions of a physician, assist people to cope with and, if possible, overcome handicaps of many types.

PHYSICAL THERAPISTS:

- -evaluate and treat patients who are referred to them by physicians through the use of exercises, mechanical apparatus, massage, and the applications of heat and cold, light, water, or electricity;
- -perform muscle, nerve and other functional tests;
- -keep records of their patients'progress and attend conferences with physicians and other personnel to discuss this progress;
- -help patients to accept the physical handicaps and adjust to them;
- -teach patients how to perform exercises and to use and care for braces, crutches and artificial limbs;
- -show patients' families how to continue treatments at home;
- -may instruct physical therapy students as well as students in related professions and other health workers.

For those who wish to determine whether they have the personal qualities needed for this occupation, summer or part-time work as a volunteer in the physical therapy department of a hospital or clinic would be extremely helpful.

JOB CLUSTER #8
"Health"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	40	$6.70-$8.00/hr.		$6.70

Because of varying rates of pay throughout Montana, specific information on salaries may be obtained at your nearby employment office or hospital.

HOURS OF WORK

Most physical therapists work a standard forty-hour week, Monday through Friday. Some therapists work half days Saturday in addition to their regular hours.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

- -paid vacations
- -retirement plan
- -group life and health insurance

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Contact the physical therapy department of your local hospital for further details.

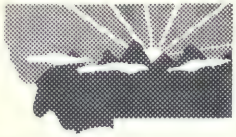
ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

American Physical Therapy Association
1156 15th Street NW
Washington, D.C. 20036

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Audiologist	076.101-010
Speech Pathologist	076.107-010
Occupational Therapist	076.121-010
Music Therapist	076.124-014



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: PHYSICAL THERAPY ASSISTANT

The PHYSICAL THERAPY ASSISTANT aids a registered physical therapist in a planned program of patient rehabilitation for the purpose of correcting or preventing certain physical conditions. The assistant can do many physical therapy procedures and has an elementary understanding of their purposes and results.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Patient	Manual Dexterity	Good coordination and reflexes
Persistent	Finger Dexterity	Full use of arms, hands and legs
Enthusiastic		Good general health
Cooperative		Good personal hygiene
Like people		Good vision and hearing (natural or corrected)
Understanding		Good strength
Like work		
Intelligent		

YOU SHOULD KNOW THAT

-clean personal habits and freedom from communicable diseases are musts in this field
-some states require a license for the physical therapy assistant
-the rewards are enormous in this health career field.

YOU MUST BE ABLE TO

-assist the registered physical therapist in a planned program of patient rehabilitation
-work successfully with patients and the other members of the health team
-explain steps and procedures since you may have to teach patients and their families how to handle treatments at home without supervision.

DOT 355.354-010

PREPARATION AND TRAINING:

RECOMMENDED HIGH SCHOOL SUBJECTS:

-Biology
-Chemistry
-Physics
-Physiology
-Communication skills
-Social Sciences
-English
-Anatomy
-Humanities

A two year training program is required in some cases. When available, an area vocational course in health occupations is recommended. Information on licensing can be obtained from State Boards of Examiners; however, no license is required in Montana.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TREND

Opportunities are available in hospitals, clinics, children's centers, physicians' offices and public health departments of state and federal government.
The need for physical therapy assistants as well as registered physical therapists exceeds the supply. Greatest need is in metropolitan areas.
For the qualified worker, some opportunities are available in Montana.

ADVANCEMENT

With more education (college degree) the assistant can advance to a registered physical therapist.

MORE ABOUT THE JOB:

Assistants perform delegated treatment activities under supervision, thus allowing registered physical therapists to better utilize their professional education and capabilities.

The physical therapy assistant has been described by the APTA as a skilled technical health worker trained at the associate level in a curriculum approved by the APTA.

The physical therapy assistant functions are:
- -application of light, water, heat, sound, massage, cold and traction
- -supervision of patients in exercise, ambulation, activities of daily living, use of splints and bracing and postural activities
- -transportation, positioning and preparation of patients for treatment
- -observation and reporting to the physical therapist necessary information concerning patients, schedules and equipment
- -caring for equipment and supplies, and assembling them for use
- -performing assigned clerical, bookkeeping and reception duties.

APTA - American Physical Therapy Association

JOB CLUSTER #8

"Health Occupations"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$750-950/mo.	$850/mo.	$750/mo.

Because of varying rates of pay throughout Montana, specific information on salaries may be obtained at your nearby employment office or hospital.

HOURS OF WORK

Most work a standard forty-hour week, Monday through Friday. Some work half days on Saturday in addition to their regular hours.

FRINGE BENEFITS

Depending on the length and place of employment, you may receive:

-paid vacations -retirement plan -group life and health insurance

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Contact the physical therapy department at a local hospital for further details.

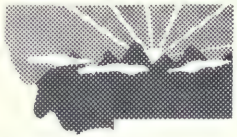
ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

American Physical Therapy Association
1156 15th Street NW
Washington, D.C. 20005

RELATED OCCUPATIONS:

JOB TITLE:	D.O.T.#:
Child care attendant	355.674-010
Nurse aide	355.670-014
Orderly	355.674-018
First aid attendant	354.677-010



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: PHYSICIAN

PHYSICIANS diagnose diseases and treat people who are ill or in poor health. In addition, they are concerned with preventive medicine and with the rehabilitation of people who are injured or ill.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Emotionally stable	Intelligent	Normal Health
Tactful	Verbal	Good vision and hearing (natural or corrected)
Perseverance	Numerical	Average or better use of arms, hands, and fingers
Responsible habits		
Desire to serve others		

YOU SHOULD KNOW THAT

Eight or more years of post high school training is required to meet minimum entry requirements for the position of physician.
Working conditions, whether in offices or hospitals, are usually safe and comfortable.
The demand for physicians is great in all areas of the United States and will continue so in the forseeable future.

YOU MUST BE ABLE TO

-learn and absorb a great deal of scientific and technical knowledge
-deal with all kinds of people in distressing as well as pleasant situations
-tolerate the sight of blood and other types of discomforting medical conditions
-work well under conditions of emotional as well as physical stress when necessary

DOT 070.101-022

PREPARATION AND TRAINING:

The physician must complete a minimum of three, and usually four, years of undergraduate college studies, a four-year course of instruction in a medical school, and one year or more of training in a hospital to qualify for a license to practice medicine.

COURSE OF STUDY INCLUDES:

High School: A college preparatory program including math, sciences, including labs, and a foreign language is recommended.

College: The specific undergraduate major varies. Usually included are studies in physiology, biology, organic and inorganic chemistry, and a foreign language, often German or Latin.

Medical School: A fully prescribed program includes studies in anatomy, biochemistry, physiology, psychiatry, opthamology, urology, microbiology, neurology, obstetrics, gynecology, pathology, pharmacology, preventive medicine, and several other areas.

ADDITIONAL FACTS ABOUT TRAINING

Courses taken and grades received are extremely important to the student wishing to enter medical school. See your counselor for more information on medical schools.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

The projected opportunities in Montana indicate for the years 1975-1985 the industry expansion will be 20, replacement needs 30, total jobs available for this period 50.

ADVANCEMENT

Advancement opportunities normally take the form of larger, more lucrative practice as the physician becomes established and experienced in a practice.

MORE ABOUT THE JOB:

The largest single group of physicians are general practitioners in private practice. Some of the specialized areas which physicians may enter with additional training are:

-internal medicine
-obstetrics
-psychiatry
-opthamology
-surgery
-pediatrics
-radiology
-pathology

There are thirty-two recognized specialties in the medical profession.

The physician may do some or all of the following:

-examine sick or injured patients for symptoms and specific injuries
-make diagnosis based on symptoms and other evidence
-give treatment such as injections in the office
-prescribe drugs and other aids and curing agents
-refer patients to specialists.

Typically, the physician works in an office alone or in association with a small number of other medical doctors. In the course of a day, the doctor will see a number of patients and will diagnose and treat some illnesses and injuries, and in some cases will refer the patient to a specialist who is competent in the area of concern.

JOB CLUSTER #8

"Health Occupations"

SALARY INFORMATION

	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary

The net income of physicians who provided patient care services averaged $54,000 in 1976.

HOURS OF WORK

In private practice, scheduled office hours vary between thirty and forty hours weekly.
Night and weekend work is sometimes necessary in emergencies and in other cases.

FRINGE BENEFITS

Physicians in private practice usually schedule some vacation and are usually closed on holidays. Life and health insurance and other such benefits are often purchased in group policies through the profession.

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

You can talk to a local physician for more details.

ADDITIONAL SOURCES OF INFORMATION:

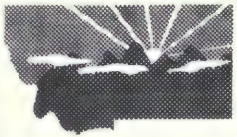
Your school counselor and librarian may also help you find additional information

Council on Medical Education
American Medical Association
535 North Dearborn Street
Chicago, Illinois 60611

Association of American Medical Colleges
One Dupont Circle, NW
Washington, D.C. 20036

RELATED OCCUPATIONS:

JOB TITLE:	D.O.T.#:
Anesthesiologist	070.101-010
Cardiologist	070.101-014
Internist	070.101-042
Psychiatrist	070.107-014
Pediatrician	070.101-066
Radiologist	070.101-090



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: PLANNING AIDE, CITY

The PLANNING AIDE compiles data for use of urban 2nd rural planners whose goals are to develop well ordered attractive cities. Aides may make field surveys to determine how land is being used or make maps, charts, and reports which help the planners.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Accurate	Clerical	Good general health
Neat	Numerical	Eye-hand coordination
Dependable	Spatial	
Legible handwriting		
Attention to detail		

YOU SHOULD KNOW THAT

-Clerical skills including typing and maintaining good reference files are part of the job;
-Many employers administer tests designed to show your suitability for employment of this nature;
-You will be under direction or supervision most of the time.

YOU MUST BE ABLE TO:

-Collect and sometimes interpret data, under direction;
-Use drafting instruments;
-Work accurately and with details;
-Perform arithmetic computations; (relatively minor)
-Establish procedures in doing routine work;
-Relate basic information to the public (on occasion).

D.O.T. 199.364-010

PREPARATION AND TRAINING:

High school graduation is the minimum requirement. For advancement of more skilled jobs, completion of two years of college plus two years of technical planning experience is required.

RECOMMENDED HIGH SCHOOL SUBJECTS:

Typing	Blueprint Reading	Local & State Govt.
English	Social Studies	Office Procedures
History	Math	Geography
Drafting	Current Events	

COURSE OF STUDY AFTER HIGH SCHOOL:

Drafting	History	Resource Management
Surveying	Cartography	Soil Science
Sociology	Art	Forestry
Urban or Rural Planning	Architecture	Geography
Geology		

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Planning aides are more likely to find jobs in the larger cities--those over 50,000 in population; although many counties are developing Planning Departments.

As more communities are turning to professional planners for help in determining the most effective way to meet problems created by urbanization and population growth, aides are needed.

Opportunities in Montana are limited, but have been expanding rapidly and continually since early 1970's.

OPPORTUNITIES FOR ADVANCEMENT

As planning aides become more experienced, workers may be assigned more responsibility which requires a higher degree of independent judgement.

MORE ABOUT THE JOB:

Beginners in urban or rural planning offices are likely to spend some time drafting, operating a calculating machine, or making field surveys and compiling statistics required to make projects for future plans.

As a planning aide under supervision, you will perform technical research, mapping, layout and design on assigned programs and projects. You may:

-Draft maps of areas proposed for rezoning;
-Search records to find past uses of land and current ownership;
-Conduct field surveys to determine existing land uses and areas;
-Compile statistical information about the proposed rezoning.

As a senior aide, you may:

-Prepare preliminary planning designs for projects;
-Work with subdividers to develop street patterns which tie in with overall traffic planning;
-Make studies and prepare reports on annexations to the city;
-Supervise the work of other aides.

JOB CLUSTER #2
"Business and Office"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$15,920-$27,000/yr	$20,000/yr	$15,920/yr

HOURS OF WORK

Hours of work are likely to be quite regular from eight to five, five days a week. Overtime is rare, unless your experience qualifies you to be promoted to regular planner.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

retirement plan
paid vacation
sick leave
health insurance
paid holidays

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LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Contact the local city-county manager or personnel director.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

American Institute of Planners
917 15th Street N.W.
Washington, D.C. 20005

State Planning Division, Dept. of Comm. Affairs
1424 Ninth Avenue
Helena, Montana 59601

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Radiographer	199.361-010
Traffic Technician	199.267-030
Polygraph Examiner	199.267-026

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: PLASTERER

PLASTERERS are skilled construction industry workers. They apply plaster and various mixtures to interior walls and ceilings. Plasterers also apply exterior stucco.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Efficient	Spatial	Good general health
Attention to detail	Numerical	Physical stamina
Careful work habits		Good vision (natural or corrected)
Pride in workmanship		Good eye-hand coordination
Good judgement		Full use of hands and fingers
		Normal use of legs and feet
		Able to lift and carry weights of 50 pounds or more

YOU SHOULD KNOW THAT

-There are many job hazards such as falls from ladders or scaffold and lime burns;
-You must be able to maintain balance at heights and be unafraid;
-You may be required to join a union.

YOU MUST BE ABLE TO

-Visualize arrangements and relationships of diagrams and blueprints;
-Work rapidly and accurately;
-Stand, stoop, lift and climb for long periods of time;
-Use independent judgement on planning sequences and in selecting tools.

DOT 842.361-010

PREPARATION AND TRAINING:

Beginning plasterers who become union apprentices must have high school graduation or its equivalent. Some employers will accept employees with less, but you should know that those who have successfully completed high school will be given preference over those who have not.

RECOMMENDED HIGH SCHOOL SUBJECTS

Most high schools provide adequate background for eventual employment as a plasterer. Math, wood and metal shops, mechanical drawing, blueprint reading, and drafting are all recommended.

ADDITIONAL FACTS ABOUT TRAINING

There is an apprentice program for plasterers including related classroom instruction and training on the job.

On-the-job training is another way many workers get started in the trade. The length of training depends on the employer.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Assuming that employment and the general economy will be good, a moderate increase in the number of plasterers employed in the next ten years is anticipated.

ADVANCEMENT

Opportunities are in the form of promotion from journeyman to supervisor if a worker has thoroughly mastered the skills of plastering and has the ability and temperament for supervision.

Advancement opportunities for most plasterers are limited.

MORE ABOUT THE JOB:

Plasterers apply wall coatings to new buildings and repair old walls. Some specialized plasterers also apply stucco to building exteriors. The plasterer's work requires care and skill if the job is to be done correctly and acceptably.

Plaster walls are applied over lathing or masonry. The plasterer may apply two or three coats depending on the requirements for a particular job.

The first coat is put on roughly and is scored to allow the next coat to stick. The second coat, called a brown coat, requires more smoothing. The third, or finish coat, requires great care and must be near perfect.

Plasterers use a number of specialized tools in this work. Among them are:

browns	straight edges	pointing trowels
screeds	feather edges	angle tools
darbies	floats	brushes

Apprentices and helpers assist the journeyman plasterer by performing simple tasks as part of their on-the-job learning experience.

On some jobs, plasterers also operate machines which apply plaster. Some work on exterior surfaces using special skills and techniques.

JOB CLUSTER #4
"Construction"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$9.50-$10.00/hr	$9.75/hr	$9.50/hr

Salaries may vary throughout the state. Check your local union or unemployment office for accurate wage information.

HOURS OF WORK

The forty-hour week is standard. Overtime is required when a deadline has to be met.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

medical insurance	paid vacation
life insurance	paid holidays
retirement plan	

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Contact the local office of the employment service for more information on the apprenticeship program.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Operative Plasterers and Cement Masons International Association of the U.S.A. and Canada
1125 17th Street, N.W.
Washington, D.C.

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Lather	842.361-010
Concrete Stone Finisher	844.461-010
Painter	840.381-010
Carpenter	860.381-022
Tile Setter	861.381-054

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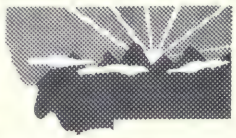

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: PLUMBER

PLUMBERS and APPRENTICE PLUMBERS install, repair, and maintain piping systems used to carry water, steam, and gases in homes, businesses and other structures.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Responsible	Mechanical	Good general health
Honest	Numerical	Physical stamina
Good judgement	Some clerical	Normal vision (natural or corrected)
Able to work alone		Full use of arms, hands, and fingers
Self starting habits		Good eye-hand coordination
		Agile

YOU SHOULD KNOW THAT

- -In order to become a journeyman plumber, you must serve an apprenticeship;
- -You must have considerable mechanical aptitude to succeed as a plumber;
- -Plumbers are less affected by seasonal slowdowns than are other construction tradespeople;
- -Hazards include burns and cuts, especially around the hands and arms.

YOU MUST BE ABLE TO

- -Work in awkward positions;
- -Tolerate extremely dirty and unpleasant working conditions;
- -Tolerate unpleasant odors;
- -Work indoors or out.

DOT 862.381-030

PREPARATION AND TRAINING:

The plumber must have a high school education and serve an apprenticeship before qualifying as a journeyman plumber.

COURSE OF STUDY INCLUDES:

High School: Recommended classes include English, math, mechanical drawing, drafting and blueprint reading. Other shop courses are also of value.

Apprenticeship: Consists of on-the-job training and uses of tools and equipment plus classroom training in required academic subjects.

ADDITIONAL FACTS ABOUT TRAINING

Training in plumbing skills in the armed services of the United States may be granted for part of the apprenticeship program. A good source for additional training information is the local apprenticeship program.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

The projected opportunities in Montana indicate for the years 1980-85 the industry expansion will be good.

Opportunities are found with contractors in new construction, maintenance and repair and in government agencies at all levels.

ADVANCEMENT

The apprentice may advance to journeyman status.

Journeyman plumbers may become supervisors for plumbing contractors.

MORE ABOUT THE JOB:

Plumbers install, maintain, and repair water, gas and waste disposal systems in all types of homes and business and government plants and office buildings. Plumbers use the following tools in their work:

pipe wrenches	fire pots	drills	saws
cutters	soldering irons	braces	pipe benders
dies	welding gear	hammers	other hand and
blow torches	reamers	chisels	power tools

Typical plumbing tasks involving the use of the tools mentioned above include:

-Bending pipe into a variety of shapes;
-Testing pipes for leaks;
-Making welded, braised, caulked, soldered and threaded joints.

Plumbers may specialize in a particular phase or operation such as gas fitting or steam fitting, although this is not always true and depends on the type of employer the plumber is working for.

Apprentices work under the direction of journeyman plumbers performing relatively simple tasks at first, and advance to the more complex jobs as their skills increase.

JOB CLUSTER #4
"Construction"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
35-40	$290-$460/week	$360/week	$290/week

The higher salaries are based on current union journeyman rates. Non-union workers may earn less. Also, remember that there may be layoffs due to weather.

Salaries may vary throughout the state. Check your local union for accurate information.

HOURS OF WORK
Hours vary between thirty-five to forty per week, Monday through Friday. Overtime is not normal, but may occur when deadlines must be met by contractors.

FRINGE BENEFITS
Depending on length and place of employment, you may receive:

pension plan	health plan
paid vacation	welfare plan
paid holidays	

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LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Contact your local office of the employment service for information on the apprenticeship program.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Plumbers and Pipefitters Local 139
1112 7th Street South, P.O. Box 1703
Great Falls, Montana 59403

Phone 452-1973

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Steam service repairer	862.361-022
Pipe fitter	862.381-018
Furnace installer	862.361-010
Pipe coverer and insulator	863.381-014

D.O.T. Fourth Edition, page 861

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: POLICE AIDES

POLICE AIDES perform a wide variety of tasks for local and state law enforcement agencies. They may type and file crime reports, work in identification bureaus, or detective divisions of police departments, sheriff's offices, and other agencies.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Dependable	Clerical	Good general health
Able to keep information confidential	Verbal	Able to bend and stoop in filing materials
Interest in law enforcement	Form perception	Able to stand for periods of time
Able to work with people	Good memory	Able to sit for long periods of time
Accurate		

YOU SHOULD KNOW THAT

-You may be asked to work swing or graveyard shifts;
-In some specific job assignments, shorthand may be required;
-There are some opportunities for part-time or student employment.

YOU MUST BE ABLE TO

-Type a minimum of 45 words per minute accurately;
-Type from recorded transcriptions;
-Keep confidential all kinds of police records;
-Be familiar with filing procedures and other standard clerical functions.

DOT 243.362-014

PREPARATION AND TRAINING:

Virtually all law enforcement agencies require a high school diploma. Unless you have had some prior experience, college training may be required.

RECOMMENDED HIGH SCHOOL SUBJECTS

Typing	English
Clerical Practices	Speech
Bookkeeping	Social Studies
Office Machines	Government

COURSE OF STUDY AFTER HIGH SCHOOL

Typing	Business Machines	Office Practices
Clerical Practices	Stenography	Social Studies
Psychology	History	

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Jobs are found in cities of all sizes.

However, most employment opportunities exist in cities with populations of 50,000 and more.

The outlook for employment is good because many clerical duties once performed by uniformed officers are now being handled by skillful trained clerical personnel.

ADVANCEMENT

Advancement usually comes in the form of increases in pay and responsibility.

Beyond this, there are limited chances for advancement to supervisory or executive secretarial positions.

MORE ABOUT THE JOB:

The police aide is a specialist whose clerical skills assist law enforcement workers with the typing, filing, and processing of hundreds of reports, records, and documents connected with the fight against crime.

The police aide may:

- -Type crime reports either from an officer's initial written report or from a recorded transcription called in by an officer in the field;
- -File crime reports and subsequent items pertinent to that particular case;
- -Take statements from witnesses or criminal suspects or type them from recorded statements;
- -Work in the identification division of a police department or sheriff's office keeping mug files, fingerprint files, rap sheets of criminals who live in the area, and wanted files listing suspects and crimes which occur in other areas of the country;
- -Take fingerprints required of many job applicants in various fields including teachers, school employees, taxi drivers, barbers, beauticians (generally, uniformed officers take fingerprints of criminal suspects);
- -Process registration slips on hand guns sold;
- -Issue and renew permits.

The law enforcement aide must learn the many crime classifications and terminology used by police and other law enforcement officers.

JOB CLUSTER #2
"Business and Office"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$565-$795/mo	$650-$725/mo	$565-$590/mo

HOURS OF WORK

The standard workweek is forty hours. Most jobs are 8 a.m. to 5 p.m. Monday through Friday. However, almost all departments have a police aide working at all times; therefore, you may be placed on a swing or graveyard nightshift and asked to work weekends with compensating weekdays off.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

paid overtime	8 to 10 holidays per year	retirement plan
paid vacation	sick leave	uniform allowance
health insurance	life insurance	

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

A local law enforcement agency may be able to provide further information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information.

Your Career in Law Enforcement
Division of Simon and Schuster, Inc.
1 West Thirty-Ninth Street
New York, New York 10018

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Cancellation Clerk (insurance)	203.382-014
Classified-Ad Clerk (print. & pub.)	247.367-010
Title Searcher (real estate)	209.367-046

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: POLICE OFFICER

The POLICE OFFICER is charged with the basic law enforcement duties of keeping the peace and protecting life and property in the city. The deputy sheriff performs identical duties in the unincorporated areas of the county.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Trustworthy	Verbal	Agile
Resourceful	Clerical	Eye-hand coordination
Honest	Numerical	Average or better strength
Good judgement		Physical stamina
Observant		Normal vision and hearing (natural or corrected)
Dependable		
Sense of responsibility		

YOU SHOULD KNOW THAT

-The injury rate is higher than in many occupations and the risks to life are greater;
-You won't qualify if you have had a previous arrest record;
-You will have to pass a competitive civil service examination for aptitude and ability;
-You won't qualify if you are color blind.

YOU MUST BE ABLE TO

-Tolerate and deal with all types of human errors and weaknesses;
-Be comfortable with and handle various types of firearms;
-Tolerate and work in bad weather;
-Work at routine tasks for relatively long periods of time;
-Work nights and weekends and holidays;
-Take and give orders.

D.O.T. 375.263-014

PREPARATION AND TRAINING:

A police officer is expected to be a high school graduate. Standards are rising and leaders in the field encourage those interested in a career in law enforcement to seek higher education at the college level.

Some police departments have developed a cadet system and youths of 18 to 21 years of age, upon examination, may obtain basic training as a police officer.

RECOMMENDED HIGH SCHOOL COURSES

English
Social Studies
Science
Typing
Foreign Language
Physical Education

COURSE OF STUDY AFTER HIGH SCHOOL

English
American History
Civics and Government
Business Law
Psychology
Physical Education
Sociology
Physics
Police Science and Criminology Courses

Dawson Community College in Glendive, College of Great Falls, Great Falls, and Montana State University, Bozeman, offer courses in law enforcement training.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

The projected opportunities in Montana indicate that for the years 1980-1990 the industry will expand; however, the number of applicants will be greater than the number of openings so that only those with the best training and personal qualifications will be accepted.

ADVANCEMENT

The police officer with experience and additional training may be promoted to sergeant, lieutenant, captain or inspector.

Promotions are usually based upon a competitive examination.

MORE ABOUT THE JOB:

Police officers, whether directing traffic at busy intersections or arresting dangerous criminals, are helping to preserve law and order. Whether on or off duty, they are expected to exercise their authority whenever necessary.

Duties may include:

-Patrolling assigned beat on foot;
-Using motorcycles or patrol cars;
-Noting suspicious persons and establishments and reporting them to superior officers;
-Reporting hazards that endanger public safety;
-Dispersing unruly crowds at public gatherings;
-Reporting to the scene of accidents and rendering first aid to injured;
-Investigating the causes and results of accidents;
-Directing and re-routing traffic around fire or other disruptions;
-Warning or arresting persons violating animal ordinances;
-Issuing tickets to traffic violators;
-Writing and filing daily activity report with superior officer;
-Taking photographs, obtaining statements, making measurements and gathering other evidence and making accident reports;
-Investigating felonies;
-Obtaining evidence and arresting suspects;
-Assisting in rescue operations;
-Using various types of firearms.

JOB CLUSTER #13
"Public Services"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	40	$935-$1200/mo	$975-$1100/mo	$935/mo

Salaries may vary throughout the state. Check with your local police station for specific information.

HOURS OF WORK

The police officer usually works a forty-hour week and often puts in overtime hours. The officer may have to work nights, weekends or holidays.

FRINGE BENEFITS
Depending on length and place of employment, you may receive:

retirement plan	health insurance
paid vacation	life insurance
pension plan	sick leave

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Contact your local police department for further details.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

International Association of Chiefs of Police Incorporated
1319 18th Street, N.W.
Washington, D.C. 20036

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
State Highway Police Officer	375.263-018
Shopping Investigator	376.267-022
Fire Inspector	373.367-010
Ranger	169.167-042
Credit Analyst	191.267-014

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: POSTAL CLERK

POSTAL OFFICE CLERKS perform a series of functions which are necessary for sorting, distributing, and otherwise processing the mail at various stages from mailing to delivery.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Reliable	Verbal	Good health
Adaptable	Clerical	Normal vision and hearing
Even tempered	Numerical	Eye-hand coordination
Mentally alert	Some mechanical	Finger dexterity
Good memory		Able to lift some heavy objects
Mature		

YOU SHOULD KNOW THAT

- -You must take a civil service examination;
- -If you do not have a high school education, you must be at least 18 years old;
- -You will receive some on-the-job training upon employment;
- -A background of simple math is needed when working with percentages, weights, and change.

YOU MUST BE ABLE TO

- -Work well with others;
- -Adapt to routine work;
- -Prepare receipts, compute charges, and give correct change to customers;
- -Lift some heavy objects, usually mail sacks weighing from 75 to 80 pounds. This is a strict requirement.

D.O.T 243.367-014

PREPARATION AND TRAINING:

A high school education is a minimum if the applicant is under eighteen years of age. Otherwise, there is no minimum educational requirement. However, you probably would not be able to pass a civil service examination without a high school education. Applicants hoping to advance to better positions are advised to have a high school education and some training at the college level.

RECOMMENDED HIGH SCHOOL COURSES:

English, Math, Business Administration

COURSES AFTER HIGH SCHOOL:

- English
- Business Administration
- Business Organization
- Cost Accounting
- Personnel Management
- Office Management
- Human Relations in Business
- Basic Report Writing
- Bookkeeping

ADDITIONAL FACTS ABOUT TRAINING:

For the candidate hoping to advance, training in business management and administration will be invaluable. The Post Office is basically a large business and each branch station is a small business operation. Upon employment you will receive some supervised on-the-job training.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

The projected opportunities in Montana indicate for the years 1980-85 the industry will be fair.

ADVANCEMENT

Most advancement is in the form of regular pay raises and more attractive duties such as window clerk.

Advancement may also be obtained by testing for supervisory positions.

MORE ABOUT THE JOB:

The postal clerk performs some or all of the following:

-Sells postage and revenue stamps, postcards, and stamped envelopes;
-Weighs parcels on scale;
-Computes mailing cost based on weight and destination;
-Verifies weight of letters;
-Computes cost of registering and insuring letters and parcels;
-Answers questions regarding postal regulations and procedures;
-Cancels postage on parcels using a rubber stamp;
-Sells postage savings certificates and U.S. Savings stamps;
-Fills out and sells money orders;
-Places letters in pigeon holes or mail rack according to names, addresses, state, zip code, or uses automatic sorting machines;
-Examines mail for correct postage and cancels, using hand stamp or automatic cancelling machine;
-Records daily transactions on printed forms;
-Receives complaints concerning mail delivery, theft, or lost mail;
-Completes appropriate forms and routes them for investigation.

JOB CLUSTER #2
"Business and Office"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$14,603-$17,188/year		$14,603/year

HOURS OF WORK
The postal clerk works an eight-hour day, five days a week. He/she may alternate days off, some weeks working Saturday and others having Saturday off.

FRINGE BENEFITS
Depending on length and place of employment, you may receive:

retirement plan
medical plan
life insurance
paid holidays
paid vacation
sick leave

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LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Your local postmaster can give you further details.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

American Society for Public Administration
1829 18th Street
Washington, D.C. 20036

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Teller, note (banking)	211.362-026
Cashier (clerical)	211.462-010
Town Clerk (gov. ser.)	243.367-018

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: POULTRY DRESSER

POULTRY DRESSERS perform a variety of tasks; when a poultry processing plant hires you, they will utilize your skills and abilities in the most effective job. Tasks may include loading and unloading birds, operating automatic machines, cleaning or shipping birds.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Responsible	Mechanical	Good physical condition
Thorough	Finger dexterity	Eye-hand coordination
Alert		Normal vision
Able to take orders		
Adaptable to routine		

YOU SHOULD KNOW THAT

- -When you apply for employment at a processing plant, you may list preferred tasks such as working in the cleaning line, warehouse, or packing operation;
- -You may be asked to alternate tasks, performing one for a few hours and then switching to another;
- -Training in various skills is provided by the processing plant.

YOU MUST BE ABLE TO

- -Stand for long periods, usually several hours while working with hands;
- -Learn to perform routine tasks and skills such as removing inner organs;
- -Follow simple orders from supervisors;
- -If you work in the loading and unloading docks of warehouses, lift heavy objects.

D.O.T. 525.687-070

PREPARATION AND TRAINING:

There is no educational requirement, although many plants prefer to hire high school graduates.

HIGH SCHOOL COURSE:

A general course of training in high school is recommended. Specialized training in vocational agriculture or machine shop will not be of great help for the processing worker.

ADDITIONAL FACTS ABOUT TRAINING:

Experience working in poultry plants or canneries will be helpful, especially in aiding the candidate to adapt to routine work. The better positions often go to candidates with prior experience and/or seniority. Training in the specific tasks required is provided on the job by the processing plant. The ability to learn to perform a certain task or tasks is especially important; candidates who cannot learn to perform relatively simple routine tasks usually will not be employed.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Openings are available for both year round as well as summer employment.

Turnover is very rapid.

Opportunities are best in large agricultural areas.

There are not many opportunities in the state of Montana.

ADVANCEMENT

There is no set line for advancement.

MORE ABOUT THE JOB:

There are many different divisons within the processing plant. Some are:

unloading	washing parts
killing	inspection
washing freshly killed birds	heart/gizzard packaging
feather removal	bird packaging
eviscerating (removing inner organs)	boxing
cleaning inner cavity	shipping
sorting (by quality of bird, weight)	plant clean-up operations

Depending upon department, the poultry dresser may:

-Unload chickens, and place them on overhead carrier racks;
-Run automatic killing machines or in smaller plants, hand kill the birds;
-Work with automatic machine which removes feathers;
-Checks for feathers left on birds and hand removes them;
-Wash clean birds, or attend automatic washers;
-Open bodies with hand knife;
-Remove inner organs of bird;
-Separate hearts, livers, gizzards;
-Clean inner cavity of remaining parts;
-Remove esophagus;
-Remove heads or work with automatic machine performing same function;
-Separate necks for packaging;
-Package birds, place in boxes;
-Separate birds according to weight and quality;
-Work in warehouse stacking boxes and preparing them for shipping.

JOB CLUSTER #12
"Marketing and Distribution"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$3.10-$3.60/hr	$3.40/hr	$3.10-$3.20/hr

HOURS OF WORK

Some overtime work is required. On the average, most workers put in about a hundred to one hundred and fifty hours of overtime each year.

FRINGE BENEFITS

Depending on the length and place of employment, you may receive:

health insurance life insurance disability insurance

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information.

U.S. Department of Agriculture
Washington, D.C. 20250

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Casing Splitter (slaught. and meat pack.)	525.687-014
Smoked Meat Preparer	525.587-014
Poultry Eviscerator	525,687-074

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: POULTRY FARMWORKER

The POULTRY FARMWORKER performs various tasks in the tending of poultry stock and in general maintenance and repair work of machinery.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Alert Responsible Enjoy outdoor work Adaptable	Mechanical Numerical Some clerical	Normal physical strength and stamina Good eyesight (natural or corrected) Average or better ability to use your fingers

YOU SHOULD KNOW THAT

- Much of the work of the poultry farmworker is routine in nature;
- Poultry farmworkers usually work more than the standard five day week and must be on call for emergencies any hour;
- Many poultry farmworkers live on the ranch where they work in housing provided by the ranch operator.

YOU MUST BE ABLE TO

- Perform heavy physical labor;
- Keep simple but accurate records for all phases of the ranch operation;
- Work carefully with your hands in the process of caring for baby chicks;
- Be alert for signs of trouble with poultry while performing routine tasks on the ranch;
- Live and work in a rural country setting.

DOT 411.584-010

PREPARATION AND TRAINING:

There are no specific educational requirements for poultry farmworkers. All beginning poultry farmworkers are given on-the-job training.

COURSE OF STUDY INCLUDES:

High School: English, basic arithmetic, and bookkeeping are recommended. Where available, vocational agriculture courses should be taken. Classes such as crafts and shops are valuable for developing manual aids and skills.

On-the-job Training: Feeding, watering, de-beaking, disease detection, record keeping, and other aspects of poultry ranching operations are taught.

ADDITIONAL FACTS ABOUT TRAINING

Preparation in Future Farmers of America and/or 4-H clubs provides good preparation for the interested youth. Some skill in simple mechanical maintenance and repair is desirable. Persons wanting the best chances for employment should complete as much formal education as is possible in order to increase necessary reading and writing skills.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Although automation has slowed the rate of growth, opportunities for poultry farmworkers are stable.

ADVANCEMENT

Poultry farmworkers may earn pay raises as they increase their personal efficiency.

On large ranches, workers may advance to management positions.

MORE ABOUT THE JOB:

Poultry farmworkers, if fully qualified, perform the numerous tasks necessary for successful operation of a poultry ranch. On large farms, the worker is likely to specialize in one or a few tasks. On a smaller farm, the worker will more likely perform all tasks. Duties also vary with the specialty of the farm, for example: egg production.

All poultry farmworkers must become proficient at recognizing signs of disease in the stock he/she tends. Losses from epidemics affecting stock are disasterous if they get out of control. Competency in disease detection and prevention is therefore a must.

Preventing diseases and maintaining healthy birds can best be accomplished by adhering strictly to high standards of cleanliness and sanitation in farm operation. Poultry workers contribute to cleanliness by:

- spraying and liming
- proper burial of dead birds
- disinfecting poultry houses
- properly disposing of manure
- keeping cages, houses, and poultry runs clean

Poultry workers should also have some knowledge of electric motors and pumps in order to be able to perform repair work on as well as operate such machinery properly.

JOB CLUSTER #1
"Agri-Business and Natural Resources"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
48-60	$150-$200/wk	$165-$185/wk	$150/wk

In addition to salary, housing and utilities may be provided.

HOURS OF WORK

The normal workweek varies from forty-four to sixty hours per six day week. Night work is required for some emergencies. During busy seasons, hours may be even greater than indicated above.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

- state disability insurance
- on some farms - housing, utilities
- free eggs and poultry
- vacation

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

U.S. Department of Agriculture
Washington, D.C. 20250

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Poultry tender	411.364-014
Poultry vaccinator	411.684-014
Farmworker, livestock	410.664-010
General Farmer	421.161-010

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: PRESSER, ALL-AROUND

PRESSERS use various types of steam pressing machines or hand irons to flatten seams and to shape garment parts and finish garments. They are employed by apparel manufacturers and cleaning establishments.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Responsible	Mechanical	Good general health
Dependable		Normal vision (natural or corrected)
Conscientious		Full use of arms, hands and fingers
Patient		Eye-hand-foot coordination
Attention to detail		

YOU SHOULD KNOW THAT

-There is a constant need for pressers in the drycleaning industry;
-The work usually requires standing for long periods.

YOU MUST BE ABLE TO

-Work with accuracy and speed;
-Work in the heat from steam pressers;
-Keep to yourself while working with a group;
-Work at a steady pace and follow all the directions;
-Follow safety practices prescribed while on the job.

DOT 363.682-014

PREPARATION AND TRAINING:

Most employers prefer to hire high school graduates. Some require high school graduates for trainee positions.

RECOMMENDED HIGH SCHOOL SUBJECTS:

No specific training in this occupation is offered in high school.

COURSE OF STUDY AFTER HIGH SCHOOL

Most dry cleaning and laundry workers learn their trade on the job. Length of training period may vary in different plants.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

There is a constant need in the dry cleaning industry for pressers.

Opportunities exist throughout the state.

ADVANCEMENT

Promotion is usually from basic to advanced and more demanding pressing skill jobs.

Chances for advancement are poor.

MORE ABOUT THE JOB:

Pressers use various types of steam machines or hand irons to flatten seams and to shape garments. Pressers may specialize in one type of pressing or ironing.

There are two basic types of pressers -- under pressers and finish pressers.

Under pressers specialize on particular garment parts, such as collars, shoulders, seams or pockets. Their duties vary from simple smoothing of cloth and flattening of seams to skillful shaping of garment parts.

Finish pressers generally do final pressing and ironing at the end of the sewing operation. Their duties vary from operating a machine which presses a dozen folded shirts at a time to hand pressing delicate ruffles on an evening gown.

JOB CLUSTER #13
"Personal Services"

SALARY INFORMATION

	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary

Wages and salaries vary with geographic location and with specific dry cleaning jobs. Finishers or pressers may work for piecework rates with a minimum guarantee. Generally finishers earn $150 to $225 a week. The salary rate will vary in union and nonunion plants.

HOURS OF WORK

Normally the forty-hour week is the rule. Hours are generally from 7 a.m. to 4 p.m. or from 8 a.m. to 5 p.m.

FRINGE BENEFITS

Depending on place and length of employment, you may receive the following:

- paid vacation
- paid overtime
- retirement plan
- health insurance

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Check the yellow pages for a commercial laundry or dry cleaning establishment.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Amalgumated Clothing Workers of America
15 Union Square
New York, NY 10003

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Fur ironer	369.685-018
Leather finisher	363.682-010
Rug cleaner, machine	361.682-010
Steam oven operator	526.382-026

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: PRINTER II

The PRINTER II is employed in commercial printing plants, newspapers and manufacturing firms to operate printing presses at maximum speed while producing a high quality product. He/she may work with any of three types of printing processes: letter press, gravure, or offset.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Dependable	Mechanical	Good health
Alert	Spatial	Physical strength and endurance
Thorough		Good coordination
Pride in work		Finger dexterity
Adaptable to routine		

YOU SHOULD KNOW THAT

- -There is much noise and vibration when the presses are running;
- -Entry into this work is usually through an apprenticeship program;
- -Union membership is often required;
- -The job often requires lifting heavy supplies and equipment;
- -There is continuous walking, standing, stooping, and kneeling required;
- -Many jobs are available in industry; printing forms, boxes or cartons, rubber goods, fabrics, and many other printed goods.

YOU MUST BE ABLE TO

- -Learn to operate complex printing presses;
- -Do accurate and precise work as fast as possible;
- -Work under the pressure of deadlines and in noisy and confusing atmosphere;
- -Work well with others, especially co-workers.

DOT 651.380-010

PREPARATION AND TRAINING:

Graduation from high school or a vocational trade school is usually required. Additional training in college or a trade school may improve your chances for obtaining a job.

HIGH SCHOOL SUBJECTS:

Printing	Math
Machine shop	Journalism
English	

ADDITIONAL FACTS ABOUT TRAINING:

A formal apprenticeship program is offered by the Printing Industries Association. Minimum age for entry is eighteen years and the program lasts four to six years. Many jobs are available without joining this program. Unions are usually quite anxious to take in members with the necessary skills even if they have not taken the apprenticeship program under a union shop. Check with the local union for verification of information.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

The projected opportunities in Montana indicate for the years 1980-85 the industry expansion will be 10, replacement needs 10, total jobs available for this period, 20.

Opportunities are best in cities.

This appears to be one craft that technology and automation are not eliminating.

OPPORTUNITIES FOR ADVANCEMENT

Printers can qualify for promotions by learning to run large and more difficult presses, or may advance to superintendent.

MORE ABOUT THE JOB:

The printer must learn to run the machine at maximum speed, yet produce high quality work. There are a number of presses which differ in size, capacity and complexity of operation. He/she must understand the mechanical functions of the press, be able to adjust or reset any unit, maintain adequate lubrication and be able to detect mechanical failures.

The printer must be able to:

- -Prepare the press for printing;
- -Receive the tape form, set it on the press and run a proof sheet from it;
- -Do the make ready work, leveling the type to insure that the print is even over the entire surface and isn't too dark or too light;
- -Start the press and check for any mistakes in impression and alignment;
- -See that the paper feeds into the press properly.

The printer can specialize in the following machines and techniques:

letter press - from type directly to paper;
gravure presses - from engraved plate to paper;
offset presses - from lithographic surface to cylinder to paper;
platemaking - with emphasis on registration for color negatives.

JOB CLUSTER #3
"Communications and Media"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$8.70-$9.32/hr	$8.95/hr	$8.70/hr

HOURS OF WORK
Union shops may work a thirty-five hour week while most others work a regular forty-hour week. Hours vary considerably from eight to five at commercial establishments to night shift on some newspapers.

FRINGE BENEFITS
Depending on length and place of employment, you may receive:

paid vacation	health insurance	sick leave
retirement plan	life insurance	paid holidays

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Contact the local office of the employment service for more information on the apprenticeship program.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

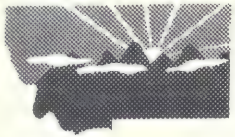
International Printing Pressman and Assistants' Union of North America
Pressman's Home, Tenn. 37850

Printing Industries of America
5223 River Road
Washington, D.C. 20016

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Steel-Die Printer (print. & pub.)	651.382-030
Transfer Operator (print. & pub.)	651.382-038
Cylinder-Press Operator	651.362-010
Web-Press Operator	651.362-030

D.O.T. Fourth Edition, page 567



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: PROFESSIONAL ATHLETE

PROFESSIONAL ATHLETES are physically skilled workers who participate in many kinds of team and individual sports for public entertainment. Baseball, basketball, football, golf and tennis are among the most popular professional sports. Auto and motorcycle racing are not considered in the VIEW script.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Competitive nature Initiative Ability to work closely with others (in team sports) Preference for outdoor activities in most cases	For an explanation of aptitudes, you are urged to see your counselor or advisor.	Above average physical strength & stamina in most cases Above average eye-hand-foot coordination Excellent vision and hearing in most cases

YOU SHOULD KNOW THAT

-you will be subject to serious injuries of many kinds, particularly in football;
-working conditions vary considerably with the type of sport;
-you will have opportunities to enter coaching and other fields related to actual athletic participation after retiring as a professional athlete;
-in most cases, completion of college is highly desirable for the potential athlete.

YOU MUST BE ABLE TO

-perform physically demanding tasks of strength, endurance, speed and other activities not normally present in other occupations;
-work away from home, sometimes for the entire season, and travel extensively;
-maintain an extremely high level of physical conditioning and efficiency throughout your career in professional athletics;
-compete under pressure against other highly skilled athletes in your sport.

DOT 153.341-010

PREPARATION AND TRAINING:

The professional athlete:

-must usually have a complete high school education;
-in some cases, the athlete must complete some college in order to gain entry into professional sports;
-on the job training usually lasts for the duration of a career.

ADDITIONAL FACTS ABOUT TRAINING

In reality, training for most successful professional athletes usually begins in childhood and those with necessary natural traits and aptitudes discover them early. Success in sports may lead to scholarships to many colleges throughout the U.S.A. Training is constant throughout most careers and aims at achieving top level skills in the finer points of the sport.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Most professional sports activities are performed in and around the larger cities of the United States.
Competition is fierce for the openings in most professional sports.
Openings occur regularly and are expected to increase slowly in number throughout the United States in future years.

ADVANCEMENT

Advancement opportunities usually come in the form of increases in pay and recognition associated with performing in the major leagues in team sports, and against top competition in the national spotlight in individual sports.
New competitors in most sports become top stars.
For many, jobs as trainers, coaches, managers, scouts, instructors and equipment representatives represent advancement and greater security.

MORE ABOUT THE JOB:

Professional athletes perform for pay before the public in several sports. Some are:

Baseball	Bowling	Ice skating
Snow skiing	Golf	Horse racing
Football	Jai Alai	Harness racing
Basketball	Swimming, diving	Soccer football
Tennis	Bull fighting	Water skiing
Hockey	Wrestling	

Many professional athletes work principally as instructors, such as the club golf pro or the tennis instructor. Others perform as competitors, in team sports such as baseball and football or as individuals as in horse racing and golf.

Specific duties of professional athletes as well as equipment used depend upon the particular sport of the individual athlete.

Most successful athletes spend several years practicing and working in minor leagues and in low level competition before reaching the top of their sport in terms of pay and recognition. Most professional athletes never reach stardom.

JOB CLUSTER #9

"Recreation and Hospitality"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary

Salaries vary greatly depending upon the sport you are involved in. Some athletes are paid by the game; others are on a yearly contract.

HOURS OF WORK

Working schedules are generally irregular and may include nights, weekends and long hours of practice. Specific schedules depend on the nature of each sport. During part of the year, there is no regular work schedule.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

pension plans	meals	travel and uniforms
health and welfare plans	group insurance	

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LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

National Industrial Recreation Association
20 North Wacker Drive
Chicago, Illinois 60606

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Athletic coach	153.227-010
Sports announcer	159.147-010
Umpire	153.267-018

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: PROOF MACHINE OPERATOR

The PROOF MACHINE OPERATOR sorts, records, and proofs records of bank transactions such as checks, deposit slips, and withdrawal slips using proof machines. The job often includes other clerical duties. Proof machine operators are mainly employed by banks because of the volume of documents that must be checked each day.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Accurate	Clerical	Good health
Efficient	Numerical	Normal eyesight and hearing (natural or corrected)
Able to get along with others		Good coordination
Dependable		Finger dexterity
Able to follow directions		

YOU SHOULD KNOW THAT

- -Proof machine operators often work under direct supervision;
- -You must be able to learn to operate various machines;
- -You should prefer working with numbers and machinery;
- -You should enjoy clerical work of all types;
- -Do work demanding excellent finger, hand, and motor dexterity.

YOU MUST BE ABLE TO

- -Pass a security check with the local or federal police;
- -Work in an organized, routine, and concrete situation;
- -Sit in one spot for most or all day doing the same type of work;
- -Work accurately and rapidly.

1111 217.382-010

PREPARATION AND TRAINING:

Education equivalent to graduation from high school is required for entry in this occupation. Experience or courses taken in which you work with machines will help you.

HIGH SCHOOL COURSES:

Business Machines	Business Math	Shorthand
Typing	Speech	Clerical Practice
Records Management	Office Procedures	Business English

COURSE AFTER HIGH SCHOOL:

Supervision	Typing	Records Management
Office Procedures	Business English	Machine Calculation
Machine Transcription	Business Math	

ADDITIONAL FACTS ABOUT TRAINING:

On-the-job training is the only method of learning the occupation. Training is usually conducted by the senior operator. Usually six to nine months of training is needed to bring the trainee to peak performance.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Proof machine operators are employed mainly in banks although a few other industries use operators for sorting sales slips.

Opportunities are best in the larger metropolitan areas.

ADVANCEMENT

Opportunities in smaller banks are often not very promising.

Employment in most larger banks provides better chances of advancement.

MORE ABOUT THE JOB:

Proof machine operators work with groups of documents such as checks and deposit slips, withdrawal or sales slips. They use the adding machine keyboard and selectra keyboard to process the documents.

They depress the keys to sort items into various categories and to list items simultaneously on master control tape and individual batch tapes. They then position items in the machine to be endorsed and grouped. The machine automatically or manually sorts items.

Operators total tapes and locate, correct, and record errors. They attach tapes to sorted batches and prepare recapitulation sheets. Then they prove deposits, checks, debits, and credits listed on batch sheets.

Designated according to trade name of the machine used, they may be called Burroughs Proof Machine Operators, IBM Proof Machine Operators, or NCR Proof Machine Operators.

Most banks require that the operator sit at the machine the full working day while others alternate this duty with other duties during the day. During the normal eight-hour day, the experienced operator will process 6,000 to 8,000 documents increasing the pace to as many as 10,000 documents during peak periods.

Some employers prefer mature persons because of their stability while others do not consider age as a factor in hiring either trainees or experienced operators.

JOB CLUSTER #2
"Business and Office"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$130-$165/wk	$145-$150/wk	$130/wk

Salaries may vary throughout the state. You may wish to check a local bank or any business which uses a proof machine operator for accurate salary information.

HOURS OF WORK

The normal workday is 8 a.m. to 5 p.m. Monday through Friday. Some banks divide their workers into shifts and half of the operators work from 10 a.m. to 7 p.m. Some banks operate a night shift.

FRINGE BENEFITS
Depending on length and place of employment, you may receive:

health insurance	sick leave	paid holidays
life insurance	paid vacation	paid overtime
retirement program		

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

The personnel manager of a local bank may be able to provide further information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

International Business Machines Corporation
Public Information Department
Corporate Headquarters
590 Madison Avenue
New York, New York 10022

American Banker's Association
12 East 36th Street
New York, New York 10016

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Transit Clerk (banking)	217.382-014
Currency Sorter	217.485-010
Bursting Machine Tender	217.685-010

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: PROSTHETIST/ORTHOTIST

PROSTHETISTS and ORTHOTISTS write specifications for and fit artificial limbs, braces, and appliances for body deformities and disorders following prescriptions of physicians. PROSTHETISTS specialize in artificial limbs; ORTHOTISTS specialize in orthopedic braces.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Patient	Mechanical	Good vision and hearing (natural or corrected)
Good judgement	Intelligent	Good physical condition
Sympathetic nature	Numerical	Above average coordination of hands and fingers
Attention to detail		Good manual dexterity
Pride in workmanship		

YOU SHOULD KNOW THAT

- -You must like and appreciate all types of people, whatever their condition;
- -Some handicapped people are employed in this field, especially as orthotists;
- -You should be able to use your hands and fingers with above average coordination;
- -Persons with asthma or other respiratory problems should not attempt this work because of the fumes from lacquers and rosin.

YOU MUST BE ABLE TO

- -Deal effectively and understandingly with the public;
- -Do work of an exacting nature with rapidity and accuracy;
- -Interpret any number of instructions--written, oral or schedule form;
- -Visualize two- or three-dimensional forms;
- -Be inventive enough to create new devices to fill particular needs.

DOT 078.261-022

PREPARATION AND TRAINING:

High school graduation is a must. Classes are usually available which will give you a basic background before apprenticeship.

RECOMMENDED HIGH SCHOOL SUBJECTS

English	Math
Wood Shop	Metal Shop
Speech	Industrial Arts

COURSE OF STUDY AFTER HIGH SCHOOL

Elementary Mechanics	Medical Terminology
Math	Physiology
Chemistry	Machine Tool
Machine Tool Principles and Practices	Properties of Materials
Structure and Function of the Human Body	Biology
	Health Education

ADDITIONAL FACTS ABOUT TRAINING

Training is usually on the job with no classroom studies required. Apprentices have a four-year program. The closest school for training is at Northwestern University in Illinois. You can check with your counselor for more information in this area.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Total employment in this field is small.

Employment will be the easiest to find in the larger metropolitan areas, but some smaller communities will have jobs available, although it will be harder to find a job.

ADVANCEMENT

Promotion is somewhat limited.

In larger shops, the highly skilled worker may become shop manager.

Those who become skilled as fitters may be paid on a commission basis.

MORE ABOUT THE JOB:

Prosthetists examine patients and measure the limb or deformity. They make a plaster cast of the limb to determine specifications for the artificial limb to be made. They then correct any deficiency or irregularity in the cast.

Construction of artificial arms involves work with plastics and fabrics together with such hardware and leather as may be needed for articulation, manipulation, and control of the arm.

Artificial legs are usually made of wood combined with metal moving parts and leather portions. In some cases, plastic materials are used in preparing the socket for the leg.

Prosthetists work with drill presses, lathes, welding outfits, serving machines, power carvers, hand saws, and other hand tools. They are provided by the employer.

The orthotist makes orthopedic braces for use in correcting physical deformities or ailments.

JOB CLUSTER #4
"Manufacturing"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary

Education, experience and certification determines earnings. Starting salaries for trained technicians are between $10,000 and $10,500 and for trained practitioners are between $14,500 and $18,000. Prosthetists in large hospitals may earn $18,500 to $23,000 a year.

HOURS OF WORK

The forty-hour week is standard in most shops.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

- paid vacations
- group health insurance
- group life insurance
- uniforms

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

American Orthotic and Prosthetic Association
1440 N. Street Northwest
Washington, D.C. 20005

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Audiometrist	078.362-010
Electrocardiograph technician	078.362-018
Electroencephalograph technician	078.362-022
X-ray technician	078.362-026

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: PSYCHIATRIC AIDE

Under the supervision of doctors and professional nurses, the PSYCHIATRIC AIDE assists in personal nursing care for patients in mental centers or state hospitals.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Responsible	Verbal	Normal vision and hearing (natural or corrected)
Understanding	Spatial	Full use of arms, hands and legs
Emotionally stable	Numerical	Average Strength
Patient		Able to walk, stand, stoop, and lift
Mature		

YOU SHOULD KNOW THAT

You cannot qualify if:

- -you have a police record for any criminal offense, particularly anything to do with narcotics;
- -you do not have patience and cannot control emotions such as anger or disgust;
- -you are not in good health and physical condition.

YOU MUST BE ABLE TO

- -Perform tasks which require walking, standing, stooping, and lifting;
- -Work under conditions which may be depressing or disagreeable at first;
- -Work closely and comfortably around persons who may be mentally ill or mentally retarded;
- -Remain calm and use good judgment in emergency situations.

DOT 355.377-014

PREPARATION AND TRAINING:

You must have a twelfth grade education or its equivalent.

RECOMMENDED HIGH SCHOOL COURSES:

Home Nursing and First Aid
When available, an area vocational course in health occupations is helpful.

ADDITIONAL FACTS ABOUT TRAINING:

You must complete training as a psychiatric technician trainee. On-the-job training includes orientation, clinical on-the-job experiences, psychiatric nursing techniques, nursing fundamentals, and psychiatric care of patients.

Psychiatric technician trainee is the entry job for the psychiatric technician job series in state mental hospitals.

Many hospitals practice a continuing form of inservice education where patient care is discussed at regular weekly or monthly meetings with one or more members of the professional staff.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITIES

-There are limited opportunities throughout the state.
-The need for psychiatric technicians has increased and is growing.
-Opportunities should increase as the emphasis on mental rehabilitation increases.
-Some employers prefer to hire mature young men and women.

OPPORTUNITIES FOR ADVANCEMENT

-With additional training, opportunities for advancement are good.

MORE ABOUT THE JOB:

The psychiatric technician works in a state mental hospital, public or private hospital, or community mental health clinic and works under the supervision of doctors and professional nurses, and is responsible for the complete care of the patient. They work with groups or on a one-to-one basis.

Some tasks are:

- -assisting in personal nursing care of mentally ill and retarded;
- -helping patients shave, dress, bathe, and eat;
- -keeping patients' living quarters clean;
- -assisting medical personnel and administering treatment and medication;
- -supervising social activities and hobbies;
- -escorting patients to and from activities on the ground;
- -helping rehabilitate patients so they can return to the community and resume normal active lives;
- -acting as a nurse, counselor, teacher, and friend to patients.

The psychiatric technician must:

- -set a climate of acceptance for the patients;
- -deal with relatives and friends of patients;
- -help develop and supervise rehabilitation programs of recreation, art, and crafts;
- -work with other professionals such as psychiatrists, psychologists, medical doctors and psychiatric nurses.

JOB CLUSTER #8
"Health"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary

HOURS OF WORK

The psychiatric technician usually works a forty-hour week. They work days or nights, may be on twenty-four hour call and will be expected to take a share of holiday and weekend work.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

- -paid sick leave
- -paid vacations
- -paid holidays
- -retirement plan
- -group insurance
- -uniforms
- -housing

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Contact with the personnel director of your local hospital.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

American Hospital Association
840 North Lakeshore Drive
Chicago, IL 60611

American Nurse's Association
10 Columbus Circle
New York, NY 10019

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Physical Therapy Assistant	355.354-010
Nurse's Aide	355.674-014
Orderly	355.674-014
Occupation Therapy Aide	355.377-010

D.O.T. Fourth Edition, page 241

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: PSYCHOLOGIST

PSYCHOLOGISTS study and apply knowledge of many areas of human behavior. They are usually specialists in experimentation, clinical work, teaching, or one of several other principal areas of concern.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Creative	Intelligent	Normal health
Good judgment	Verbal	Normal Hearing (natural or corrected)
Precise	Numerical	Ability to use arms, hands and fingers
Interest in others		
Orderly habits		

YOU SHOULD KNOW THAT

-Working conditions of psychologists vary widely depending on the specialty of the individual; most, however, work indoors in schools, institutions, or offices.
-Physical handicaps do not disqualify workers in psychology providing the handicap does not interfere with the performance of duties.
-Psychology is a rapidly expanding field, providing opportunities fitting a wide variety of interests and in many specialties and types of work in the disciplines.

YOU MUST BE ABLE TO

-Express yourself well verbally in writing and be able to use statistical and other research tools.
-Work analytically and objectively with facts and concepts relating to basic human motivations and behavior patterns.

DOT 045.067-014

PREPARATION AND TRAINING:

The psychologist must have at least a master's degree to qualify for most jobs. For many top level entry jobs, the Ph.D degree is necessary.

COURSE OF STUDY:

High School: A college preparatory program is recommended.

College or University: Majors in psychology and graduate training in the field are available at colleges and universities throughout Montana.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITIES

-Shortages are greatest in the fields of clinical and counseling psychology.
-The majority of opportunities are found in urban areas and college towns.
-The projected opportunities in Montana indicate for the years 1980-85 the industry expansion will be minimal, but opportunities exist due mainly to replacement needs.

OPPORTUNITIES FOR ADVANCEMENT

Advancement opportunities depend on the area in which one works.

MORE ABOUT THE JOB:

The term "psychology" encompasses a broad range of specific disciplines and concerns. Three major areas into which more specific disciplines may be identified are:

Experimental: Laboratory investigation and research into such areas as learning, perception, sensation, and other concerns is emphasized.

Therapeutic: Includes clinical, counseling, and school psychology and the testing, diagnosing, analysis, and treatment of emotional, social, and other mental ills in schools, clinics, and various kinds of institutions involved in individual casework.

Applied: Business and industrial psychology is the domain of the applied psychologist. Included is the study of efficiency of industrial organization in terms of man in relation to various machines and manned machine systems, labor management relations, job problems of individuals, job analysis, cost efficiency, personnel selection and promotion, and others.

The areas listed represent a broad classification only and much overlap occurs in reality. Most psychologists, while working in one or another area, have considerable knowledge of basic areas outside their principal concern.

In college and university teaching, the psychologist may instruct in one or a number of closely related areas in the field of psychology. Some college and university instructors combine teaching duties with outside work in their field.

JOB CLUSTER #8
"Health"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
35-40	$25,600/annual (medium)		

Psychologists in private practice as well as some who are salaried may earn more than the maximum shown.

HOURS OF WORK

In colleges and universities, hours number around thirty-five or more weekly, Monday through Friday. In institutions, hours are usually forty but may include nights and/or weekends at times. In private practice, clinical and counseling hours are likely to be around forty hours weekly, Monday through Friday.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

-paid vacations
-paid holidays
-group life and health insurance
-retirement plans
-sick leave
-regular pay raises

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

American Psychological Association
1200 17th Street, N.W.
Washington, D.C. 20036

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Developmental Psychologists	045.061-010
Educational Psychologists	045.067-010
Engineering Psychologists	045.061-014
Experimental Psychologists	045.061-018
Social Psychologists	045.067.014
Psychometrist	045.067-018

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: PUBLIC RELATIONS REPRESENTATIVES

PUBLIC RELATIONS REPRESENTATIVES develop and maintain public opinion favorable to organizations using their services. They have become valued as advisers on policy in the organizations where they work. In attempting to win public approval of a client, product, or service represented by public relations representatives, a good public relations program takes into consideration the likes, dislikes, needs and interests of the public.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Creative	Intelligent	No specific requirements
Initiative		
Self-confident		
Perseverance		
Outgoing personality		
Leadership		

YOU SHOULD KNOW THAT

- -Public relations representatives have to work long hours at times to meet commitments and deadlines;
- -A degree from a four-year college or university is a recommended but not necessary preparation for entry into the public relations field;
- -Public relations is a steadily expanding field of work.

YOU MUST BE ABLE TO

- -Express yourself in written and spoken English clearly and simply;
- -Express yourself in an original and creative fashion and view problems in many different ways;
- -Work well with all kinds of people and under pressure.

DOT 165.067-010

PREPARATION AND TRAINING:

The best preparation for entry is writing experience for media and could include a bachelor's degree from a college or university. Some people in the field enter through a combination of less than four years of college and some professional experience in the field.

COURSE OF STUDY:

High School: A college preparatory program is recommended.

College or University: Acceptable majors vary. Journalism, public relations and related majors are taken for entrance into the field of public relations.

ADDITIONAL FACTS ABOUT TRAINING

Exceptionally important in terms of preparation outside the classroom is writing experience which may be gained on the high school and college newspaper and in many other ways. Other extracurricular activities demonstrating leadership are valuable. A good command of language and spelling are essential.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

The field of public relations is expanding at a fairly rapid rate.

However, there are many applicants for each job and opportunities are good only for well qualified individuals.

There are not many opportunities throughout the state of Montana, but the field is expanding and the opportunities which do exist are worthwhile.

ADVANCEMENT

Advancement opportunities take many forms depending upon your place of employment.

MORE ABOUT THE JOB:

Public relations representatives provide information about their employer's business or programs of a government agency to newspapers, magazines, radio and television. Public relations representatives may be known by several titles depending on the nature of their work. Some other titles are public relations consultants, public relations directors, publuc relations managers and public information officers.

Regardless of their title and the nature of the employer, most public relations representatives share certain standard duties. Some of these are:

- -Researching, organizing and writing news releases, articles and other written presentations for use by newspapers, radio, television and other news and information media;
- -Acting as a representative of the employer in civic affairs such as fund raising activities for charity, for civic improvement and for related purposes;
- -Giving direct presentations involving speeches, films and demonstrations to groups of people in schools, community organizations and other assemblies which inform people of particular products or programs of the employer;
- -Providing information about the employer and their products and programs to other employees, particularly in large businesses.

Public relations representatives employed by large businesses, agencies, or government organizations are likely to specialize in a particular facet of public relations such as public speaking, speech writing, writing newspaper and other releases or other aspects. Representatives employed by a small company or agency usually perform a wide variety of work.

JOB CLUSTER #2
"Business and Office"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	40	$13,800-$40,000 annually		

Salaries are highest in large companies.

HOURS OF WORK

Hours of work probably will be irregular at times. Evening and weekend work may be required to meet deadlines. The basic workweek for most public relations representatives is forty hours.

FRINGE BENEFITS

Depending on place and length of employment, you may receive:

paid vacations	sick leave
paid holidays	retirement plan
profit sharing plans (some jobs)	group life and health insurance

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Public Relations or Advertising Firms
Major Industries

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Superintendent of Documents
Government Printing Office
Washington, D.C. 20402

Ask for document, Why Not Be A Public Relations Worker?

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Public-Information Writer	165.067-010
Sales-Service Promoter	165.167-010
Public Affairs Officer	188.117-106

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: PUMP SERVICER

The PUMP SERVICER installs and performs shop and field repairs on pumps used in irrigation or for municipal or residential water supplies.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Dependable	Mechanical	Good eye-hand coordination
Accurate	Spatial	Able to stoop, crawl, and bend sometimes in close quarters
Attention to detail	Numerical	
Likes the outdoors		
Likes to work alone		

YOU SHOULD KNOW THAT

- -This is an occupation which can provide year around employment in any agricultural area in the state or nation;
- -There are related opportunities in industrial and municipal water systems;
- -Usually you will be provided with a service truck equipped with hoist and other equipment and be required to have a diver's license;
- -You will be required to provide your own hand tools.

YOU MUST BE ABLE TO

- -Work alone and often make your own decisions and improvise repairs depending on the situation;
- -Understand the basic principles of electricity and plumbing;
- -Do some gas and arck welding;
- -Learn to use the basic tools of the plumber, welder, and electrician.

DOT 630.281-018

PREPARATION AND TRAINING:

While there is no formal minimum training, most employers would prefer a high school graduate.

RECOMMENDED HIGH SCHOOL COURSES:

Welding	Metal Shop	Electricity
Machine Shop	Business Math	Auto Shop
Sales	Drafting	Blueprint Reading

ADDITIONAL FACTS ABOUT TRAINING:

Most beginners go to work in a helper's capacity with a large irrigation equipment installation firm, with a pump company or with an experienced repair person in a smaller shop.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Jobs are found in cities of all sizes.

Most opportunities, however, exist in agricultural communities particularly in agribusiness centers where there are likely to be several companies with major irrigation and pump sales.

There is currently some demand for both qualified service people and apprentices.

ADVANCEMENT

The worker who starts as a helper can expect to become a fully qualified servicer in one or two years.

There are also opportunities for independent ownership of a pump installation and service firm.

MORE ABOUT THE JOB:

The pump servicer is a specialist in the installation and repair of pumps and related equipment used in agricultural, industrial and residential water systems.

Normally the pump servicer will receive orders from the service manager either directly or by two-way radio. He/she will proceed to the job site as directed and inspect the equipment to determine what the trouble is. He/she then may recommend repair or replacement of equipment, depending on the malfunction. If the customer agrees to replacement, he/she may return to the shop to get the proper equipment to make temporary repairs and place new equipment on order.

Some repairs are relatively minor and can be made on the job site. Major repairs may require that the pump be removed and returned to the shop for repair.

He/she does not normally make estimates on repairs but may relay this information to the service manager and back to the customer.

He/she will deal with the following types of pumps:

jet	turbine	direct displacement
submersible	high pressure	non-clog

JOB CLUSTER #14
"Public Services"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$5.20-$7.00/hr	$5.75-$6.50/hr	$5.20-$5.70/hr

Salaries may vary throughout the state. Check a local source for current information in your area.

HOURS OF WORK

The normal workweek is forty hours from 8:00 a.m. to 4:30 p.m. Monday through Friday. However, emergencies often require overtime work and some companies require employees to serve standby duty on weekends or holidays rotating these duties among all crewmembers.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

Paid overtime	Sick leave	Retirement plan
Paid vacations	Health insurance	Commissions on sales
Free transportation	Bonus plan	Profit sharing

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs.
You may contact a youth representative at your local Employment Service Office

Your local employment service office may be able to supply further information.

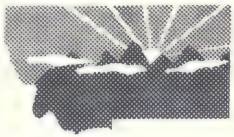
ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information.

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Air-Conditioning Mechanic	637.261-014
Refrigeration Mechanic	637.261-026
Compressed-Gas Equipment Service Mechanic	630.281-034

D.O.T. Fourth Edition, page 550



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: PURCHASING AGENT

The PURCHASING AGENT purchases raw materials or other unprocessed goods for processing, machinery, equipment, tools, parts, produce and other supplies or services necessary for operation of organization.

The PURCHASING AGENT can be the most valuable asset a company has. Money saved through wise buying can be just as important as money made through increased sales.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Dependable	Verbal	Good grooming
Cooperative	Numerical	Good general health
Tactful	Mechanical comprehension	Normal eyesight and hearing (natural or corrected)
Alert	Intelligent	
Integrity		
Diplomacy		
Firm in making decisions		

YOU SHOULD KNOW THAT

- -Buyers occupy a position of considerable power and responsibility; they must therefore be above temptation;
- -You should be efficient and methodical and able to analyze errors in decisions;
- -You should have an enthusiasm and preference for business;
- -You may be working under pressure of deadlines.

YOU MUST BE ABLE TO

- -Show skills in business relations with associates and the public;
- -Do detailed work essential in checking prices;
- -Use independent judgement in making decisions;
- -Be willing to put in time on your own studying purchasing techniques and learning about your company.

DOT 162.157-038

PREPARATION AND TRAINING:

A four-year college training program is usually required.

RECOMMENDED HIGH SCHOOL SUBJECTS:

English	Business Problems	Typing
Speech	Sales	Sciences
Business Math	Retailing	Industrial Arts

COURSE OF STUDY AFTER HIGH SCHOOL:

Commercial Law	Bookkeeping	Records Management
Consumer Problems	Business Law	Business English
Business Organization	Personnel Management	Economics
Marketing	Supervision	Psychology
Retailing		Sociology

ADDITIONAL FACTS ABOUT TRAINING:

Most employers prefer a person with college training. Experience is not always needed as most employers provide on-the-job training. Training can take from six months to a year. Some jobs will require engineering or scientific background. Purchasing agents usually start as aides or buyers in a purchasing department.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Purchasing agents are employed in cities of all sizes.

Chances for employment will be best in the larger metropolitan areas.

Purchasing agents are employed in manufacturing companies, wholesale and retail establishments, government agencies, hospitals, schools and other institutions.

ADVANCEMENT

Purchasing agents usually start as buyer trainees.

After on-the-job training, they will usually advance to buyer or senior buyer and finally to assistant purchasing agent or purchasing agent.

MORE ABOUT THE JOB:

Purchasing Agents select the merchandise to be sold in a store and outline the selling program for this merchandise. Purchasing Agents experience both successes and failures in the goods purchased. They must have information as to what the customer's likes and dislikes are. The Purchasing Agents must keep accurate records so that they will know what the trends are as well as the level of the buying public the store serves.

JOB RESPONSIBILITIES:

-Know both merchandise and customers who shop at their store;
-Determine quality and quantity of merchandise that customers buy;
-Help to prepare budget for buying;
-Spend time in selling or in close relationship to the sales people;
-Buy from sales persons who come to the store, or make occasional trips to big centers, such as New York;
-Attend fashion shows for buyers;
-Check new merchandise for accuracy and damaged goods and then establish selling price;
-Keep an accurate record from year to year to know trends and levels of buying.

JOB CLUSTER #11
"Marketing and Distributing"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$15,000 - $20,000 annually		

Salaries may vary throughout the state or from private industry to governmental agency. Check a local source for accurate salary information.

HOURS OF WORK

The forty-hour week is standard. Some time may be spent attending meetings, reading, preparing reports, visiting suppliers' plants or traveling.

FRINGE BENEFITS
Depending on length and place of employment, you may receive:

retirement program	paid vacation	sick leave
paid overtime	paid holidays	health and life insurance

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

National Association of Buying Officers
100 West 31st Street
New York, New York 10001

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Broker	162.157-010
Buyer (ret. tr.; whole. tr.)	162.157-018
Field Contractor	162.117-022
Securities Trader (finan. inst.)	162.157-042

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MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: RADIO AND TELEVISION ANNOUNCER

RADIO AND TELEVISION ANNOUNCERS present news and live commercial messages, introduce programs, describe sporting events, conduct interviews, and identify stations.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Pleasant	Verbal	Normal vision and hearing (natural or corrected)
Outgoing	Numerical	Well modulated voice
Imaginative	Some clerical	No speech defects
Adaptable	Finger dexterity	
Personable		
Poise		
Good sense of timing		
Mentally alert		

YOU SHOULD KNOW THAT

- There are many similarities between radio and television announcing, but two basic classifications of announcers are common to both parts of the industry: the staff announcer and the free-lancer;
- Combination people are radio staff announcers who have other duties in addition to the regular on-air activities;
- Speech defects can prevent even the well prepared person from being employed.

YOU MUST BE ABLE TO

- Work under pressure at a hectic pace;
- Compete aggressively to hold your job;
- Learn to operate a variety of electronic equipment;
- Do routine announcing functions with enthusiasm even after the five-hundredth time.

DOT 159.147-010

PREPARATION AND TRAINING:

The radio and television announcer is expected to be a high school graduate. You can find post high school training in college. Most employers prefer college background or liberal arts degree.

RECOMMENDED HIGH SCHOOL COURSES:

English	Speech
Math	Journalism

COURSE OF STUDY AFTER HIGH SCHOOL:

Survey of Broadcasting	Introduction to Radio
Radio-Television News Processing	Introduction to Television
Telecommunications	Dramatic Script Writing
Television Production I and II	Educational Television

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

In television, the rule seems to be that announcers without experience are not hired.

Many new jobs are in the smaller cities with the small stations.

Most stations maintain lists of applicants for announcing jobs and call in promising candidates from the files when openings occur.

Competition for new jobs is keen and the applicants must use all their resources to meet it.

ADVANCEMENT

Advancement is usually from the small city station to the metropolitan station.

The normal line of promotion runs from staff announcer to program director and operations manager.

MORE ABOUT THE JOB:

Radio and television announcers are the direct auditory and visual contact between the broadcasting media and the audience. They may be familiar by voice, sight, or name to millions of listeners who rely on them for many kinds of information.

The radio and television announcer:

- -Presents live news and commercial messages;
- -Describes sporting events;
- -Conducts interviews;
- -Identifies station;
- -As a "disc jockey", plays recorded music and makes comments;
- -May be designated as local announcer or network announcer;
- -Sells broadcasting time;
- -Operates the control board;
- -Writes scripts and news copy;
- -Introduces and plays musical recordings;
- -Ad libs commentary without a script;
- -May keep records of programs in which he/she participates.

JOB CLUSTER #3
"Communications and Media"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40-48	$700-$1,500/mo	$900-$1,200/mo	$700-$735/mo

Salaries may vary from station to station. Television network announcers earn high salaries.

HOURS OF WORK

The forty-hour workweek is standard, Work may include weekends, holidays, and evenings. Small stations have split shifts.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

- paid vacation
- paid overtime
- double time on holidays
- retirement plan
- profit sharing
- health insurance

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LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Check with the personnel director at your local radio or television station for further information.

ADDITIONAL SOURCES OF INFORMATION:

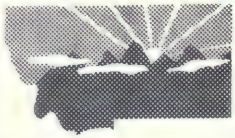
Your school counselor and librarian may also help you find additional information

National Association of Broadcasters
1771 N Street, N.W.
Washington, D.C. 20036

American Federation of Television and Radio Artists
1350 Avenue of the Americas
New York, N.Y. 10019

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Announcer (amuse. & rec.)	159.347-010
Disc Jockey	159.147-014
Radio Director	159.167-014



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: RADIO DISPATCHER

RADIO OPERATORS or DISPATCHERS communicate with personnel in the field by the use of two-way radio units. Most operators are government service workers.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Tactful	Verbal	Good hearing
Calm	Numerical	Full use of speaking facilities
Trustworthy	Clerical	Normal use of and ability to manipulate hands and arms
Honest		
Pleasant speaking voice		
Attention to detail		

YOU SHOULD KNOW THAT

- For most jobs with public agencies, your character will be thoroughly investigated;
- The normal civil service hiring procedure with public agencies employing radio operators includes testing and interviews.

YOU MUST BE ABLE TO

- Work days, nights, and weekends to hold many radio operator positions;
- Keep accurate written records of communications;
- Maintain a pleasant but business-like attitude at all times when communicating with field workers as well as with the public;
- Secure a Federal Communications Commission radio operator's permit as a condition of employment.

D.O.T. 379.362-010

PREPARATION AND TRAINING:

The radio operator should have a high school education or its equivalent. He/she is trained on the job in all cases. The radio operator can benefit, especially for future opportunities, from some college training in courses relating to radio communication.

COURSE OF STUDY:

High School: English, typing, business arithmetic, electricity shop, and courses in public speaking are recommended.

College: English, public speaking, and courses in radio communication are valuable training.

ADDITIONAL FACTS ABOUT TRAINING

Excellent training for radio operators and those interested in related work is available in all branches of the United States Armed Forces. Ham radio operation as a hobby is good training.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities for operators exist in greatest numbers in large cities.

Operators are employed by public agencies and by certain businesses that specialize in rapid service to homes.

Turnover is great because of irregular working hours.

Opportunities are limited throughout the State of Montana.

ADVANCEMENT

Advancement opportunities are limited for most radio operators. Occasionally one can advance to Communications Chief.

MORE ABOUT THE JOB:

Radio operators or dispatchers operate radio consoles for the purpose of transmitting and receiving information and instructions between a central office and field personnel.

In addition to the basic task of radio operation, most operators perform the following tasks:

- -Maintains complete logs and records of all communications received and transmitted;
- -May give and receive information for the general public;
- -May refer telephone calls to proper channels;
- -Keeps files of records;
- -Will often do routine typing work;
- -May prepare reports;
- -Performs some maintenance work on equipment used;
- -Performs related assigned tasks.

The beginning radio operator or dispatcher will perform simple tasks under close supervision and with experience, take on more duties until becoming fully qualified.

JOB CLUSTER #3
"Communications and Media"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$175-$225/wk	$180/wk	$175/wk

In some areas, salary raises are automatic at set intervals. Salaries may vary throughout the state. Check a local source for area information.

HOURS OF WORK

The normal workweek for radio operators is forty hours. Weekend work is routine as well as rotating shifts.

FRINGE BENEFITS

Available depending on length and place of employment, you may receive:

- paid vacation
- paid holidays
- paid sick leave
- worker's compensation
- retirement plans
- group insurance

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Police Radio Dispatcher	379.362-010
Station Operator	379.362-010
Alarm Operator	379.162-010
Service or Work Dispatcher	952.167-010

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: RADIO AND TELEVISION REPAIRER

RADIO AND TELEVISION REPAIRERS install, repair, and service not only television and radio receivers, but a growing number of electronic products.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Honest	Mechanical	Good general health
Reliable	Numerical	Normal or corrected vision and hearing
Tactful	Some clerical	Full use of arms, hands, fingers, and thumbs
Courteous		Eye-hand coordination
Good Judgement		Agile and strong
Accurate		Climb ladders while carrying antennas and tools to rooftops
Precise		

YOU SHOULD KNOW THAT

- Many radio and television repairers belong to the International Brotherhood of Electrical Workers or other unions;
- Handicapped workers may become radio-television repairers if they can perform the physical motions required;
- You are expected to furnish your own hand tools;
- If employed in a union shop, you are required to join the union within thirty days.

YOU MUST BE ABLE TO

- Walk, stand, sit, and lift;
- Drive a vehicle, climb ladders while carrying antennas and tools to rooftops;
- Work outside in bad weather and use considerable physical effort;
- Work in customers' homes as well as in workshop situations.

D.O.T. 720.281-018

PREPARATION AND TRAINING:

The radio and television repairer should have a high school education or its equivalent. Trade school or vocational preparation is an asset in finding employment as a technician.

COURSE OF STUDY INCLUDES

- Radio Shop
- Electric Shop
- Basic Electronics
- Algebra
- Trade Mathematics
- Speech
- English
- Physics

ADDITIONAL FACTS ABOUT TRAINING

The journeyman must have two to four years of experience servicing radios and television sets. You will have to prove your abilities on the job. You should have a complete knowledge of color television. You should have experience in consumer electronics but work with industry will be considered for the person who can adapt to retail service. The Helena Vocational Technical Center offers a course in radio/TV maintenance service.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

The projected opportunities in Montana are good for the repairer who keeps updated in the field. Much retraining and continuous education will be needed at all levels of radio/TV service.

ADVANCEMENT

Advancement is usually in the form of salary increases for the well qualified journeyman.

MORE ABOUT THE JOB:

The radio and television repairer's job consists of three phases:

installation
- selects antenna best suited for type of receiver;
- assembles and secures antenna;
- work must conform to insurance requirements and local ordinances;
- tests, drills, waterproofs, connects, and makes all necessary adjustments.

outside service calls
- must diagnose the problem and make repairs;
- tunes the receiver, inspects chassis, tests voltages, and replaces tubes or parts.

benchwork
- use oscilliscopes, signal generators, and other test devices;
- check circuits and components, replacing parts and soldering;
- in small shops, takes time out to answer the telephone, sell radios and television sets and other equipment.

The radio and television repairer may work in small owner operated shops, in factory service centers, or in the service sections of large department or appliance stores. He/she may be called upon to lift heavy objects, climb ladders, walk on rooftops, and work in bad weather.

JOB CLUSTER #3
"Communications and Media"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$170-$225/wk	$205/wk	$170/wk

Salaries may vary throughout the state. Check local source for accurate salary information for your area.

HOURS OF WORK

The usual workweek is forty hours, Monday through Friday. Overtime, night work, and work on weekends is not uncommon.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

- paid vacations and holidays
- group insurance
- discount privilege
- sick leave
- profit sharing plan
- Social Security

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

National Association of Television and Electronics Servicers of America
5908 South Troy Street
Chicago, IL 60629

Electronics Industries Association
2001 Eye St., N.W.
Washington, D.C. 20006

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Tape recorder repairer	720.281-014
Electric motor analyst	721.261-010
Tester, motors and controls	721.281-030
Electrical Repair person	829.281-014

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: RADIOLOGIC TECHNOLOGISTS

A RADIOLOGIC TECHNOLOGIST or medical X-ray technician works under the directions of a physician--usually a radiologist. X-rays may be used to diagnose illnesses, detect injuries, or treat diseases. Technicians must be United States Citizens and must pass a test given by the American Registry of Radiologic Technologists.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Initiative	Numerical	Normal vision and hearing
Tact	Some Mechanical	Good general health
Sympathy		Normal use of hands and arms
Good judgement		Good color and depth perception
Precise		
Concern for detail		

YOU SHOULD KNOW THAT

Errors in judgement can have serious consequences.
You cannot qualify if:
- -you have an active communicable disease
- -you have a handicap that would affect job performance
- -you have a tendancy toward anemia.

YOU MUST BE ABLE TO

- -make your own decisions;
- -deal directly with people who may be seriously ill or injured;
- -understand and manipulate electrical machinery;
- -give close attention to detail for long periods of time;
- -keep medical information confidential;
- -work under general supervision and follow established instructions closely.

DOT 078.362-026

PREPARATION AND TRAINING:

One must obtain a degree in radiologic technology. This may be done by attending a two-year training program in a hospital approved by the American Medical Association. The two-year course of study includes:

- professional ethics
- sterile techniques
- radiographic techniques
- office procedure
- pathology
- supervised on-the-job experience
- medical terminology
- radiographic positioning
- physics
- anatomy and physiology
- radioactive isotopes

ADDITIONAL FACTS ABOUT TRAINING

Students may be paid a training wage and have a scholarship aid available to them while they are training. Most training institutions prefer applicants between the ages of eighteen and thirty. Completion of an approved course of study makes the student eligible for application to become a registered radiologic technologist.

PROSPECTS AND OPPORTUNITIES:

JOB AVAILABILITY TRENDS

There are excellent opportunities for employment in this occupation due to a lack of licensed technicians. This lack is expected to continue. The greatest need is in small communities where one must perform additional duties.

ADVANCEMENT

There is little opportunity for advancement in small communities. In large clinics or hospitals; one may become chief X-ray technician, radiation protection specialist, X-ray instructor or supervisor.

MORE ABOUT THE JOB:

The radiologic technologist operates x-ray equipment under the direction of physicians who are usually radiologists. Two major areas of work for the radiologic technologist are diagnostic and therapeutic x-ray application. The radiologic technologist submits x-ray pictures to a radiologist for interpretation. Over 33% of all radiologic technologists are employed in hospitals. They set up and operate both stationary and mobil X-ray equipment. Typical job duties include:

- -takes X-ray photographs of various portions of the body
- -positions patients under X-ray machine
- -regulates controls to expose film
- -develops and dries film
- -assists in X-ray and radium therapy
- -maintains records of X-ray taken
- -maintains X-ray equipment in efficient operating condition, prepares film developing, fixes, and solutions
- -takes precautions to protect patients and staff from electric shock and penetration of rays.

May also perform related tasks such as photography and operation of heart disease or brain damage diagnostic equipment.

The radiologic technologist has a wide choice of places to work. About 66% of them are employed in private medical laboratories, in physician's offices or private clinics, in public health clinics, industrial clinics, and in dental offices or dental clinics. Duties are similar to those in hospitals.

The radiologic technologist may serve with mobile truck units; may X-ray flaws in materials and products in industry; and, in smaller clinics and physician's or dental office, may be asked to perform clerical duties.

Job Cluster #8 - "Health"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	40	$6.00-$7.30/hr.		$6.00/hr.

Salaries will vary throughout the state. Check your local hospital for accurate salary information.

HOURS OF WORK

The forty-hour workweek is normal. You may be on a twenty-four hour call basis. You may work holidays, weekends, or late evening shifts.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

- -paid holidays
- -paid vacation
- -sick leave
- -retirement plan
- -health insurance

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Contact the radiology department of a local hospital or clinic for further details.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

The American Society of Radiologic Technologists
645 North Michigan Ave.
Chicago, IL 60611

The American Registry of Radiologic Technologist
2500 Wayzata Blvd.
Minneapolis, MN 55405

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Nurse (R.N.)	075.374-010
Physical Therapy Technician	076.224-010
Electrocardiograph Technician	078.362-018
Electroencephalographic Technologist	078.362-022
Dental Hygienist	078.368-014
Respiratory Therapist	079.361-010
Medical Assistant	079.367-010
Dental Assistant	079.371-010

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MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: RADIOLOGIST

The RADIOLOGIST is a medical doctor who specializes in the use of Xrays and radioactive materials in the diagnoses and treatment of diseases. The practice of radiology can be divided into three clinical fields: diagnostic radiology, radiation therapy and nuclear medicine.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Open-minded	Verbal	Good health
Self-disciplined	Numerical	Good vision and hearing
Conscientious	Scientific	Eye-hand coordination
Reliable	Some mechanical	Full use of hands, arms, and legs
	Intelligent	Free from communicable disease

YOU SHOULD KNOW THAT

-The radiologist is a specialist and must serve three to four years residency after completing medical school and an internship period which means a total of up to twelve years of training.
-Working conditions in hospitals and medical offices are usually comfortable and safe.
-Hazards of the job include exposure to radiation and disease.
-The demand for trained radiologists is great throughout the nation.

YOU MUST BE ABLE TO

-Work extremely well under pressure, always remembering that a patient's life may be in your hands.
-Pass state medical examinations to qualify to practice radiology.
-Learn to absorb and apply great amounts of detailed scientific and technical information and master the various skills necessary.
-Work well with others, especially patients as well as fellow workers.

DOT 070.101-090

PREPARATION AND TRAINING:

The radiologist must meet the following educational and training requirements:

-graduation from high school;
-completion of a four-year college course;
-four years of training at an accredited medical school;
-one year of internship in a hospital;
-three to four years residency; and pass a state examination.

RECOMMENDED COURSE OF STUDY:

High School: A college preparatory course is recommended.

College: The candidate should major in any one of the following areas: Physiology, biology, organic or inorganic chemistry, and should follow an approved pre-med course of study.

Medical School: A fully prescribed program includes studies in anatomy, bio-chemistry, physiology, psychiatry, opthamology, urology, microbiology, neurology, obstetrics, gynecology, pathology, pharmacology, and other areas.

PROSPECTS AND OPPORTUNITIES:

JOB AVAILABILITY TRENDS

There is a great demand for all physicians. Newly trained radiologists will be needed to replace those who retire from the field. Since the practice of X-rays is used in all geographical areas, job openings should be available in practically all localities.

ADVANCEMENT

Radiologists with the necessary experience will be able to choose their field of specialty and advance to positions of leadership in the field of research if they want to.

MORE ABOUT THE JOB:

The radiologists job includes:

-diagnosing and treating diseases of the human body;
-using X-rays and radioactive substances to treat;
-examining internal structures and functions of organ systems;
-making diagnoses after correlation of X-ray findings with other examinations and tests;
-treats benign and malignant internal and external growths by exposure to radiation from X-rays, high energy sources, and radioscopes;
-administers radiopaque substances by injection, oral application, or as enemas in order to make internal structures and organs visible on X-ray films and fluoroscopic screens;
-uses a variety of equipment to perform the various tasks.

Equipment used:

-X-ray machines
-fluoroscopes
-natural radioscopes
-manmade radioscopes
-linear accelerators

JOB CLUSTER #8
"Health"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$54,800/annual (medium)		

A radiologist employed by a hospital is usually paid a flat salary. A specialist employed by a clinic or working in private practice is paid usually on a fee-per-patient basis.

HOURS OF WORK

The normal workweek is between thirty and forty hours. Hours may be irregular as the radiologist must be on call to treat patients at all hours. Overtime and weekend work is usually the rule rather than the exception.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

-life insurance -sick leave -holidays
-retirement plans -free health coverage -vacations

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Council on Medical Education
American Medical Association
535 North Dearborn Street
Chicago, Illinois 60610

RELATED OCCUPATIONS:

There are 32 fields of specialization in the medical profession.

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
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THE JOB: RAILROAD WORKER

RAILROAD WORKERS, including engineers, firepersons, conductors, brakepersons, and clerks, are directly responsible for the operation of trains while on the run, at terminals, or in railroad yards.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Responsible	Mechanical	Good physical condition
Mentally alert	Numerical	Keen eyesight and hearing
Accurate	Some clerical	Excellent color perception
Safety conscious		Stamina

YOU SHOULD KNOW THAT

-You must follow established policies and regulations;
-You will have to pass an examination on train operating rules;
-Railroad workers are covered by Railroad Retirement instead of Social Security.

YOU MUST BE ABLE TO

Meet schedules on time;
-Deal effectively with people;
-Work irregular hours.

DOT 005.061-026

PREPARATION AND TRAINING:

You must be a high school graduate. For most jobs, particularly on the trains, in the yards, and around the stations, training is received on-the-job.

RECOMMENDED HIGH SCHOOL COURSES

English, math, shop courses

You must be able to satisfactorily complete a test on the consolidation code of operating rules and also make a few trips for experience before you can be employed.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities for railroad workers are limited throughout the state.

Nationwide, there will be an increased demand for professional engineers and skilled personnel who can maintain new mechanical and electrical equipment.

Although railroad employment has gradually decreased in recent years, anticipated growth in freight traffic should reverse this trend in the next few years.

Almost all railroad workers belong to a union.

ADVANCEMENT

Advancement is based on seniority with the job going to the qualified individual of longest service.

MORE ABOUT THE JOB:

Railroad workers can be divided into five main groups: 1) those who operate trains; 2) those who perform communication, station and office work; 3) those who build and maintain locomotives, cars and other rolling stock; 4) those who build and maintain tracks, structures and other railroad property; and 5) those who handle luggage, prepare and serve food, and provide other personal services to passengers.

Operating employees (group 1) work together as train crews. They actually run the train and are responsible for passenger and freight loading and unloading, switching cars, throwing track switches and fueling locomotives.

Office employees (group 2) regulate the movement of trains and take care of business affairs.

Car service employees (group 3) perform a variety of repair and maintenance tasks necessary to keep railroad freight and passenger cars in good working condition.

Track service employees (group 4) maintain, construct, and repair tracks, roadbeds, bridges, tunnels, crossing signals, and many other kinds of structures along the right of way.

Personal service employees (group 5) are in charge of sleeping and parlor car service, preparing and serving food, handling luggage, and in general, assisting passengers in boarding and leaving trains.

JOB CLUSTER #15
"Transportation"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$7.47-$13.00/hr	$8.82-$9.20/hr	$7.47/hr

This salary range is based on an average of railroad workers in five categories (engineers, firepersons, conductors, brakepersons and clerks). A local source or union should be checked for accurate information in a specific category.

HOURS OF WORK

The basic workweek is forty hours. You will be required to work weekends, holidays and evenings.

FRINGE BENEFITS
Depending on length and place of employment, you may receive:

health insurance	pension	accident insurance
paid vacation	life insurance	paid holidays

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Association of American Railroads
American Railroad Building
1920 L St., N.W.
Washington, D.C. 20036

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Test driver (auto mfg.)	806.281-050
Test pilot (aircraft)	196.263-042
Firer, locomotive	910.363-010
Rail-Flaw detector - car operator	910.363-014

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: REAL ESTATE APPRAISER

REAL ESTATE APPRAISERS work for any of a number of agencies, institutions, and associations. They inspect property in order to determine its value for purchase, sale, investment, mortgage, loan purposes or estate settlement.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits		Aptitudes	Physical Abilities
Accurate	Tactful	Numerical	Good vision and hearing
Precise	Personable	Verbal	(natural or corrected)
Dependable	Good judgement	Clerical	Normal health
Analytical	Objective manner	Spatial	

YOU SHOULD KNOW THAT

- -A considerable amount of driving is required, but long trips are not usually part of the job;
- -A long training period is required before you will be considered a fully competent appraiser;
- -Appraisers must keep up with real estate trends as well as trends in their own field;
- -Income is usually related to experience, education, aptitude, age, and personality, roughly in that order.

YOU MUST BE ABLE TO

- -Use records at court house, read and understand deeds and know real estate terms;
- -Learn to read and interpret engineering drawings and maps and make mathematical calculations;
- -Analyze data collected and make sound decisions based on the facts;
- -Provide your own car in most cases and be willing to travel on occasion;
- -Be able to identify different types of construction and know and understand building codes.

D.O.T. 191.267-010

PREPARATION AND TRAINING:

The real estate appraiser is expected to have a high school education. You should have some background in real estate work experience. Most agencies require some college background.

COURSE OF STUDY:

Real estate principles	Sales	Accounting
Real estate practice	Public administration	Business math
Real estate law	Real estate finance	Business law
Economics	Insurance	Retailing
Real estate appraisal		

ADDITIONAL FACTS ABOUT TRAINING

Most agencies require graduation from college with a major in either/or business administration, public administration, economics, political science, or architecture. Some agencies only hire real estate appraisers who have had two to five years of experience. A college education greatly increases the opportunity for initial employment.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Prospects are limited throughout the State of Montana.

Opportunities exist with financial institutions, real estate developers, insurance companies, public utility companies, building and loan associations, and government agencies.

ADVANCEMENT

The real estate appraiser with experience and additional training may be promoted to supervisor, chief appraiser, manager.

If the community is large enough, the appraiser may own their own business.

MORE ABOUT THE JOB:

Real estate appraisers appraise improved and unimproved real property to determine its value for purchase, sale, investment, mortgage, or loan purposes. An appraiser inspects property in order to prepare a complete description.

Among the duties of the real estate appraiser are:

-Interviews people familiar with property;
-Takes measurements;
-Inspects property for construction, condition, and functional design;
-Computes depreciation and reproduction costs;
-Considers location and trends or impending changes that could influence future property values;
-Searches public records of sales, leases, assessments, and other transactions;
-Compiles data and estimates value of property;
-Submits written reports to corroborate value established;
-Photographs property;
-Estimates current land values;
-Estimates potential gross income on income property;
-Does property title search;
-All appraisers must compile and maintain a good comparison sale and information file and keep it up to date.

JOB CLUSTER #12
"Marketing and Distribution"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	40	$15,000-$30,000/yr	$20,000-$23,000/yr	$15,000/yr

Salaries may vary dependent upon need for services or whether commissions are involved.

HOURS OF WORK

The forty hour workweek is customary. There is some evening and weekend work involved.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

paid vacations
paid holidays
health insurance
pension plan
hospital insurance

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

National Association of Realtors
430 N. Michigan Ave.
Chicago, IL 60611

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Appraiser, personal property	188.167-010
Appraiser, automobile	241.267-014
Diamond expert (jewelry)	770.267-010
Shop estimator	807.267-010
Line inspector	822.267-010
Insurance adjustor	241.217-010

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: REAL ESTATE SALES AGENT

The REAL ESTATE SALES AGENT is associated as an independent contractor or works as an employee for a Broker; and lists, shows, sells and rents real property. They also draw up real estate contracts, such as deeds, loans and mortgages.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Mature	Mathematical	Normal or corrected vision and hearing
Neat	Clerical	Good general health
Emotionally stable	Good memory	
Enthusiastic		
Tactful		
Good judgement		
Patient		
Friendly		
Articulate		

YOU SHOULD KNOW THAT

You are expected to be a high school graduate or have equivalency thereof. The real estate business has wide fluctuations, affected by seasons, the mortgage market and general economic conditions.

YOU MUST BE ABLE TO

- -provide a comfortable, reliable, late model car, with preferably 4 doors
- -be completely up-to-date on the latest zoning regulations, tax rates financing and contract law
- -successfully complete a state licensing examination
- -be self-motivated and be able to motivate others
- -be a self-starter and be able to schedule time and work efficiently

DOT 250.357-018

PREPARATION AND TRAINING:

You are expected to be a high school graduate or have the equivalent education. Post high school education courses are available in colleges, extension courses, adult schools, and private business schools.

COURSES OF STUDY INCLUDE

- English
- economics
- real estate law
- bank and financing law
- real property law
- contract law
- law of agency
- construction
- psychology
- mathematics
- merchandising
- business administration
- selling techniques
- appraisal
- survey

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

There are real estate sales agents servicing the entire state of Montana. Opportunities are best in the office that demonstrates genuine interests in promoting continuing real estate education and professionalism in all aspects of servicing the clientele.

ADVANCEMENT

Sales agents with experience and training may advance to:

- -real estate broker
- -real estate broker/manager
- -real estate broker/owner
- -real estate counseling
- -property manager
- -securities and syndication
- -master appraiser
- -agricultural specialist
- -commercial specialist
- -residential specialist
- -industrial specialist
- -recreation specialist

MORE ABOUT THE JOB:

Real estate sales agents or brokers are at the center of most real property transactions. They represent property owners or prospective owners who wish to buy, sell, rent or exchange residential, commercial, industrial, agricultural and recreational properties.

Real estate sales agents:

-continue their education, both through the classroom and on-the-job, to insure the most accurate market conditions for their clientele
-study property listings to become familiar with the sale, rent or exchange of that property
-interview prospective clients for listings
-accompany prospect to the property site
-discuss the terms and conditions of the sale, lease or exchange
-assist in drawing real estate contracts, in coordination with an office broker and and with legal counsel
-assist in the negotiations for loans on the property
-assist in the title searches and escrow procedures
-assist in compilation of tax and insurance information
-assist the real estate office in recording sale of property

JOB CLUSTER #2

"Business and Office Occupations"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	Varies widely		

Earnings of real estate sales agents vary and depend on many factors, most especially self-motivation and experience. The annual salary can be as low as $1,000 or as high as $30-35,000. The sales agent is generally on a commission basis and depending on the office policy can vary from approximately 3% to approximately 5% of the gross sale.

HOURS OF WORK

There is usually no schedule of work hours or work days. A majority of the work is on weekends and in the evenings.

FRINGE BENEFITS

If employed and depending on the length and place of employment you may receive full or partial payment of medical and life insurance and perhaps vacation with compensation. If the sales agent is operating as an independent contractor within a brokerage office, the medical and life insurance is usually available but at their own expense. Vacation is without compensation.

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Check the yellow pages for a real estate agency and contact the agent for more information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

The Montana Board of Real Estate
LaLone Building
Helena, MT 59601

The Montana Association of REALTORS
501 N. Sanders
Helena, MT 59601

National Association of REALTORS
430 Michigan Avenue
Chicago, IL 60611

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Life Underwriter	169.167-058
Automobile Sales	273.353-010
Building Supply Sales	279.357-050
Floor Covering Sales	270.357-026

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MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: RECEPTIONIST

The RECEPTIONIST is employed by many kinds of businesses to greet clients and customers, answer and relay telephone calls, and give appropriate information. Other duties may include typing, filing, sending bills and doing light bookkeeping.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Tactful	Verbal	Good speaking voice
Patient	Clerical	Normal hearing & vision
Resourceful	Numerical	(natural or corrected)
Pleasant		
Communicative		
Punctual		
Good grooming		

YOU SHOULD KNOW THAT

- You will usually be assigned other duties because greeting people does not occupy you full time;
- There are openings for receptionists in many fields;
- You may be required to work evenings, nights, and weekends depending on the job;
- Possession of additional clerical skills such as shorthand will enable the receptionist to advance more rapidly.

YOU MUST BE ABLE TO

- Handle telephone calls diplomatically;
- Be as courteous at 5 p.m. as you were at 9 a.m.;
- Sit for long periods of time;
- Meet the public in a pleasant and helpful way;
- Memorize names, details, facts, and places;
- Keep confidential matters to yourself.

D.O.T 237.367-038

PREPARATION AND TRAINING:

The receptionist is expected to have at least a high school education, and should know fundamentals of correct spelling, punctuation, business English, basic arithmetic, and typing.

RECOMMENDED COURSE OF STUDY

Typing	Office procedures	Bookkeeping
Clerical procedures	Business machine operation	Business English

ADDITIONAL FACTS ABOUT TRAINING

Specialized on-the-job training is necessary for working in hospitals, doctors' offices and some industrial plants.

SPECIAL ENTRY REQUIREMENTS

Certain personal qualities in meeting and dealing with the public are necessary.

Pleasant personality, pleasing voice, attractive appearance, and social maturity are very important.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities for employment are good and are expected to increase. Opportunities are best in large urban areas.

ADVANCEMENT

The receptionist usually advances to secretarial or stenographic work.

The worker with training, ability, and desire can become an executive secretary, office manager, or supervisor.

Chance for advancement is slight without further training.

MORE ABOUT THE JOB:

Duties of the receptionist include:

-Greeting business customers (or patients in a hospital or doctor's office);
-Directing the caller to the proper department or person;
-May ask caller to wait until the person they wish to see is free;
-May record the visitor's name, address, phone number, and purpose of visit;
-May make an appointment for a future visit;
-Answering routine questions;
-Serving as an information clerk;
-May help out-of-town callers locate travel or lodging accommodations;
-Answering the telephone or operating small telephone switchboard;
-Sorting and distributing mail to proper offices;
-Directing shippers to proper loading areas;
-Keeping daily record of employee attendance;
-Typing letters and memos in spare time;
-Some filing of letters, catalogs, and other correspondence;
-Operating intercom unit in office or operating radio unit to contact office personnel who are working in the field;
-In a defense plant, serving as a security clearance checker;
-Typing envelopes for mailing brochures;
-Stuffing and sealing envelopes for mailings.

JOB CLUSTER #2
"Business & Office"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
35-40	$147-$166/wk	$155/wk	$147/wk

Because of varying rates of pay throughout Montana, specific information on salaries may be obtained at your nearby employment office.

HOURS OF WORK

The forty-hour workweek is normal. You may be asked to work some evenings and Sundays; however, overtime is unusual. Hospitals and some industries do have night shifts.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

paid vacations
hospitalization
paid holidays
medical insurance
retirement pension

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Your school counselor may be able to give more information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

United Business Schools Association
1730 M. Street Northwest
Washington, D.C. 20005

National Association of Legal Secretaries (International)
P.O. Box 905
Beckley, W. Va. 25802

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Legal Secretary	201.362-010
Secretary	201.362-030
Court Reporter	202.362-010
Stenographer	202.362-014

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: REPORTER

REPORTERS gather information about newsmaking events and write stories for publication in newspapers or broadcast on radio or television. They may be assigned to cover special areas or beats such as police news, local government, schools, or politics.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Honest	Verbal	Good general health
Dependable	Some Clerical	Good hearing
Aggressive		Use of both hands and arms
Persuasive		Good vision (natural or corrected)
Concern for accuracy		
Liking for people		

YOU SHOULD KNOW THAT

-overtime work is common, particularly if you cover government or crime beats.
-you attend many long meetings.
-you will be on call 24 hours a day in most jobs.
-there is more hard work than glamour in reporting jobs.

YOU MUST BE ABLE TO

-work under pressure of constant deadlines
-type at least thirty-five words per minute with relatively few mistakes.
-concentrate while surrounded by confusion.
-summarize in brief space, the vital facts of a story.

DOT 131.267-018

PREPARATION AND TRAINING:

Completion of two years of college is the absolute minimum education. Most newspapers prefer four-year college graduates and large papers and T.V. stations are hiring persons with master's degrees.

RECOMMENDED COURSE OF STUDY

english	science
journalism	typing
history	photography
current events	speech

Courses in radio and television broadcasting are a must if you are thinking about this media.

PROSPECTS AND OPPORTUNITIES:

JOB TRENDS

There is always a demand for qualified reporters at all levels.
Jobs exist in cities of all sizes.
Jobs for the beginner are usually available in smaller cities.

ADVANCEMENT

Opportunities for advancement in this field are almost unlimited for the able worker.
The apprentice or cub reporter, after three to five years job experience, may achieve journeyman status.
He/she may then advance to such jobs as copy editor, wire editor, and make-up editor.

MORE ABOUT THE JOB:

Reporters are the vital link in the transmission of information from its source to the public. Stories may range from routine writing of obituary notices to covering riots, or from writing up luncheon club happenings to political interpretation.

Reporters start as cubs writing obituaries (obits.) and rewriting routine handouts about club meetings and assigned feature stories.

Many reporters get their first beat assignment as police reporters covering the many routine crime news stories which occur. They are responsible for finding worthy news from police reports, jail booking slips, talking with officers, verifying the facts and writing the story.

In some cases, the time factor may not allow the reporter to return to his/her office to write. He/she may use the telephone and dictate his/her story to a rewrite person.

Radio newsreporters work in much the same way except that they have fewer deadline problems, particularly on big stories where regular programming may be interrupted for news bulletins.

TV news is a rapidly growing operation, one which is employing a good many reporters. Stations which a few years ago had fifteen minutes a day of locally programmed news now have two to three hours a day of news programming,

JOB CLUSTER #3
"Communications & Media"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40-60	$150-$400/wk*	$200-$300/wk*	$150-$200/wk*

*These salaries are listed through newspaper unions. Salaries may vary throughout the state, Check local media for accurate salary information in your area.

HOURS OF WORK
Although the forty hour week is standard, up to twenty extra hours a week is put in by many reporters. Most papers pay time and one half for overtime. Hours of work are usually from 6:30 a.m. to 3:00 p.m. or 7:30 a.m. to 4:00 p.m. on an afternoon paper, 3:00 p.m. to midnight on a morning paper. Radio reporters work around the clock. Those on weekly newspapers usually work 8:00 to 5:00.

FRINGE BENEFITS
Depending on length and place of employment, you may receive

paid overtime	sick leave	life insurance
paid vacation	health insurance	profit sharing
paid holidays	expense account	mileage allowance

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Talk to the personnel director at the local newspaper or radio and T.V. station.

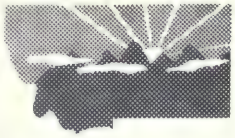
ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

American Newspaper Publishers Association
P.O. Box 17407, Dulles International Airport
Washington, D.C. 20041

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.
Correspondent	131.267-018
Newswriter	131.267-014
Copywriter	131.067-014



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: RESPIRATORY THERAPIST

A RESPIRATORY THERAPIST is a para-medical specialist who works under the supervision of a physician. The therapist uses special equipment such as respirators and positive-pressure breathing machines to administer gas therapy, aerosol therapy and other treatments involving respiration. They may also show patients and their families how to use the equipment at home.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Tact	Intelligence	Good eyesight and hearing
Patient	Verbal	Normal use of hands & legs
Cleanliness	Numerical	Good physical condition
Responsibility	Finger dexterity	Good eye-hand coordination
Accurate		Free of communicable disease
Alert		
Prompt		
Cooperative		
Good Judgement		

YOU SHOULD KNOW THAT

-The word "para-medical" means associated with medicine as an accessory or helpful capacity;
-Respiratory therapy is a relatively new para-medical field;
-Respiratory therapy is used primarily in the treatment of heart and lung ailments;
-The Respiratory Therapy Department of a large hospital (500 beds) may employ 15-20 individuals.

YOU MUST BE ABLE TO

-Help the patient according to specific instruction from the physician;
-Understand the physical and psychological needs of the patient;
-Deal directly with patients and their families;
-Have thorough technical knowledge of equipment operation and basic understanding of cardio-pulmonary physiology;
-Make minor repairs and adjustment to equipment as needed.

DOT 079.361-010

PREPARATION AND TRAINING:

RECOMMENDED HIGH SCHOOL COURSES:

English
History
Math
Biology
Chemistry
Physiology
Zoology

Until a few years ago, nearly all those working in Respiratory Therapy Departments received their training on the job under the supervision of a nursing service dept.

There are now an increasing number of formal schools in operation, following a 2-year curriculum approved by the American Medical Association.

For a current listing of these schools, write to:

The American Medical Association
535 North Dearborn Street
Chicago, Illinois 60610

SPECIAL ENTRY REQUIREMENTS:

A Respiratory Therapist:

-Must pass a health examination;
-Must be a high school graduate;
-May be registered after written and oral exams and had one year of clinical experience in Respiratory Therapy under medical supervision after completing the 2-year curriculum.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Continuing exploration shows unlimited potentiality for Respiratory Therapy, a new frontier in medicine.

The demand is great, not only for therapists, but also for instructors.

ADVANCEMENT

A trainee may advance to a technician, chief therapist, or a supervisor within the Respiratory Therapy Department.

MORE ABOUT THE JOB:

The Respiratory Therapist must be able to:

-Serve the patient according to specific instructions from the physician;
-Understand the doctor's goal in using Respiratory Therapy;
-Keep several kinds of written records which must be clear and concise;
-Clean, disinfect, and repack apparatus for re-use;
-Demonstrate equipment to physicians, nurses, and others;
-Work with critically ill patients and confront death, perhaps more frequently than those in some of the other medical occupations.

The Respiratory Therapists and Technicians are sometimes called Inhalation Therapists.

JOB CLUSTER #8
"Health"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$12,400-$20,000/yr	$15,000-$18,000/yr	$12,400/yr

Because of varying rates of pay throughout Montana, specific information on salaries may be obtained at your nearby hospital.

HOURS OF WORK

40-hour workweek is normal. However, you may work day, evening, or night shift.

FRINGE BENEFITS
Depending on length and place of employment, you may receive:

- health insurance
- retirement plan
- paid vacation
- sick leave
- paid holidays

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

American Association for Respiratory Therapy
1720 Regal Row
Dallas, Texas 75235

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Anesthetist	070.101-010
Electrocardiograph Technician	078.362-018
Electroencephalographic Technician	078.362-022
Dialysis Technician	078.362-014

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: RESTAURANT MANAGER

RESTAURANT MANAGER positions range from managing large luxury eating establishments to owning and operating small restaurants. The manager must see that a smooth, efficient, and profitable operation is maintained.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Stable	Numerical	Good general health
Ambitious	Clerical	Good hearing and eyesight (normal or corrected)
Perseverance	Verbal	
Friendly	Organizational	Full use of legs and feet
Flexible	Analytical	
Poise		
Leadership		
Honest		

YOU SHOULD KNOW THAT

- -A manager aspirant should have a keen interest in food and in serving and working with people;
- -Most people hoping to become restaurant managers start out in lesser jobs in restaurants owned by others;
- -Excellent opportunities lie in franchise operations in which a manager supervises a well-established food service chain operation.

YOU MUST BE ABLE TO

- -Plan, formulate, and execute policies of management;
- -Acquire knowledge of various administrative concepts and successfully apply them;
- -Deal effectively with people at all levels;
- -Relate to people in a manner to win their confidence and establish rapport;
- -Be on your feet most of the working day and do considerable walking, mostly during mealtime and preparation.

DOT 187.167-106

PREPARATION AND TRAINING:

A high school education is a minimum requirement today for successful managers in this competitive industry.

Besides training and education, there is no substitute for working experience in various restaurant posts, particularly that of assistant manager.

Some restaurants and restaurant chains offer on-the-job training rotating the trainee through all phases of restaurant work.

RECOMMENDED HIGH SCHOOL SUBJECTS:

English, math, business

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities throughout the state are limited.

ADVANCEMENT

Advancement may be from assistant to manager to franchise operator manager.

MORE ABOUT THE JOB:

The restaurant manager must supervise and coordinate activities of workers. The more specific duties include:

-Requisition or purchase food;
-Confer with chef in planning menu;
-In accordance with sanitary regulations, must inspect kitchen, dining room, and equipment for cleanliness;
-Arrange catering and other special services;
-Hire, instruct, and schedule personnel.

The restaurant manager must also establish contact with customers and be opened to constructive criticism in terms of improving the establishment.

JOB CLUSTER #2
"Business and Office"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	Variable	$200-$250/wk	$220-$235/wk	$200-$220/wk

Salaries may vary throughout the state. Check a local source for accurate salary information in your area.

HOURS OF WORK
Working hours may be excessive. Often the first to arrive and the last to leave is the manager.

FRINGE BENEFITS
Depending on length and place of employment, you may receive:

retirement plan
health insurance
paid vacations
life insurance

VV10579

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

National Restaurant Association
1012 14th Street, N.W.
Washington, D.C. 20005

The Food Service Executive's Association
1028 Connecticut Avenue, N.W.
Washington, D.C. 20006

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Manager, liquor establishment	187.167-126
Manager, camp	187.167-066
Manager, theatre	187.167-154

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: ROOFER

ROOFERS are skilled construction tradeworkers who apply material such as tile, slate, and composition roofing to roofs.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Responsible	Spatial	Normal vision (natural or corrected)
Good judgement	Physical abilities	Full use of hands and fingers
Preference for outdoor work		Good eye-hand coordination
Enjoy strenuous activity		Stamina
		Sense of balance
		Able to lift up to 100 lbs.

YOU SHOULD KNOW THAT

- -To become a roofer, you must serve an apprenticeship in the trade;
- -You will be required to join a union to work as a roofer;
- -You should not consider becoming a roofer if you have a fear of heights;
- -Serious potential hazards of falls from heights and burns from hot tar are part of the working conditions of roofers;
- -Roofing work is seasonal and declines during rainy periods of the year as well as during wintertime.

YOU MUST BE ABLE TO

- -Work from heights on ladders, scaffolding, catwalks, and other structural parts;
- -Work on slanting surfaces at various heights above ground level;
- -Perform work while standing, bending,squatting, stretching, or leaning;
- -Work as part of a team while maintaining personal responsibility for your own work;
- -Use standard hand tools such as hammers, punches, knives, and others with skill.

D.O.T. 866.381-010

PREPARATION AND TRAINING:

The roofer must have a high school education or its equivalent. A roofer will serve an apprenticeship period before qualifying as a journeyman roofer.

COURSE OF STUDY:

High School: English and basic arithmetic are necessary. Shop classes of all kinds and a maximum number of classes in physical education are valuable training.

Apprenticeship: Consists of on-the-job training in use and care of tools and equipment, techniques for working with tar, composition, gravel, and other materials, and learning safety practices related to the work. The required classroom work includes instruction in applied arithmetic, blueprint reading, and other academic subjects.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities for roofers exist with roofing contractors in cities of all sizes.

Opportunities are currently below normal throughout the state.

During periods of bad weather, opportunities for employment decrease.

ADVANCEMENT

All roofers first advance through stages of the apprenticeship program until they achieve journeyman status in approximately three years.

Journeyman roofers may advance to foremen or superintendent for a roofing contractor.

MORE ABOUT THE JOB:

Roofers and roofer apprentices prepare and build roofs using a number of different materials requiring various techniques of application. Materials used are:

- asphalt
- wood shingles
- tar
- tile
- slate
- waterproofing and dampproofing material
- various types of metals
- composition shingles and sheets
- gravel

The roofer uses many tools, both hand and power types. Some of these include:

- manually and thermostatically controlled tar kettles
- power diven hoists and lifts
- compressors and spray rigs
- hammers
- hatchets
- pointing trowels
- turnsnips
- chalklines
- knives

Before applying a new surface to a roof, the roofer must prepare the surface to be worked. In the case of a new surface, this presents little problem. But when the work is being done to replace an old surface, then the latter must be removed and smoothed in preparation for a new roof.

JOB CLUSTER #4
"Construction"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$1690-$2121/mo	$1774/mo	$1690/mo

The wage scale may vary throughout the state. Check the local union or employment service for salary information in your area.

HOURS OF WORK

The normal workweek is forty hours, Monday through Friday. Overtime is rare but does occur when deadlines must be met.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

- paid vacations and holidays
- health and welfare plans
- premium pay for overtime
- profit sharing plans

Usually, the above mentioned benefits do not occur together under any one union contract, although most will. Benefits vary from area to area and contract to contract.

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

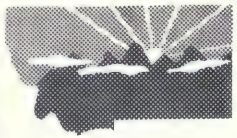
ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

National Roofing Contractors Association
1515 N. Harlem Ave.
Oak Park, IL 60302

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Plumber	862.381-030
Carpenter	860.381-022
Bricklayer	861.381-018
Tilesetter	861.381-054
Marblesetter	861.381-030



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: ROUTE DRIVERS

ROUTE DRIVERS are important in the distribution of goods and services. They usually travel over assigned routes in light trucks, calling daily or less frequently at homes or business establishments.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Neat appearance	Numerical	Good physical health
Personable	Mechanical	Stamina
Self confident	Some clerical	Eye-hand-foot coordination
Initiative		Good hearing
Tactful		Good vision (natural or corrected)
Honest		

YOU SHOULD KNOW THAT

- -You must have a good driving record and the ability to obtain a chauffeur's license;
- -Most employers of route drivers require some previous work experience;
- -For some, though not all, route driver jobs you must be twenty-five years of age;
- -Most route drivers are members of a local union though the particular one varies with the industry involved;
- -Wholesale route drivers generally earn more than retail route drivers.

YOU MUST BE ABLE TO

- -Carry weights up to fifty pounds, at times, up and down stairs;
- -Bend up and down to lift items regularly handled;
- -Persuade potential customers of their need for your service;
- -Work without supervision;
- -Keep accurate records of money and products taken or dispensed.

DOT 292.353-010

PREPARATION AND TRAINING:

The route driver should have a high school education or its equivalent. You will receive some on-the-job training.

COURSE OF STUDY

High School — Courses in English, Business Math, Driver Education, Bookkeeping, and Public Speaking provide good preparation.

College — Training in Sales, English, Public Speaking and Bookkeeping is good preparation. Any college training is useful.

On-The-Job — Training may consist of such things as orientation to the products and services provided by the employer, or work in a warehouse or office to familiarize you with the operation and services of the employer.

ADDITIONAL FACTS ABOUT TRAINING

Some companies which employ route drivers also employ driver helpers. Work as a driver helper is one way of gaining entry into the route driver field for younger drivers.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Route drivers are employed by bakeries, dairies, dry cleaners, laundries and other retail businesses as well as by numerous wholesale businesses.

Opportunities for route drivers exist in cities and towns of all sizes.

ADVANCEMENT

Advancement for most route drivers is in the form of transfers with seniority to preferred routes.

MORE ABOUT THE JOB:

The route driver, or driver sales person, drives a truck over a regular route to deliver products of all kinds to customers. The route driver may deliver to homes or businesses.

The route driver typically performs the following types of duties during the day:

- -Loads or observes and supervises the loading of his/her truck at the beginning of the day;
- -Checks to be sure that he/she has enough merchandise;
- -Calls on regular customers along the route whether they be homes or stores;
- -Dispenses merchandise along the route;
- -If a wholesale route driver, may arrange merchandise on store shelves or in other display areas;
- -Solicits new business by calling on potential customers at their homes or places of business;
- -May or may not accept money from customers, depending on the nature of the business;
- -May perform some minor repairs and make adjustments on vending machines.

All route drivers drive a good deal of the time and must be proficient drivers in all kinds of traffic and weather conditions. All must constantly observe and practice accepted rules of traffic safety when behind the wheel.

JOB CLUSTER #11
"Marketing & Distribution"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	Vary			

Most route drivers are paid a salary plus commissions based on a percentage of the sales and collection they make. Beginners may receive from $110 to $135 a week, and after acquiring experience and increasing sales in their territories, salaries may increase to between $215 and $325 a week.

HOURS OF WORK

Hours per week vary widely from less than thirty during slack periods to more than sixty during busy periods. The average is between forty and forty-eight per week. Hours are worked Monday through Saturday during the day.

FRINGE BENEFITS

Depending on length and place of employment, you may receive the following:

- pension plan
- paid vacation
- paid holiday
- paid sick leave
- health and welfare plans
- uniform allowances (some jobs)

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LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office.

Contact the personnel department of a bottling company or dairy.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Subscription crew leader (ret. tr.)	291.157-010
Contribution solicitor (non-profit org.)	293.357-014
Goodwill ambassador	293.357-018

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: SALES CLERK

The SALES CLERK obtains or receives merchandise, totals bill, receives payment, and makes change for customers in such retail stores as tobacco shop, drug store, candy store, or liquor store. Stocks shelves, counters, or tables with merchandise. Sets up advertising display or arranges merchandise on counters or tables to promote sales. Stamps, marks, or tags price on merchanidse. Obtains merchandise requested by customer or receives merchandise selected by customer. Totals price and tax on merchandise selected by customer, using paper and pencil, cash register, or adding machine, to determine bill; receives payment, and makes change. Occasionally calculates sales discount in determining sales slip. Wraps or bags merchandise for customers.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Tactful	Numerical	Good general health
Patient	Clerical	Stamina
Courteous	Verbal	No foot or leg problems
Outgoing		Good vision and hearing (natural or corrected)
Poised		
Responsible		

YOU SHOULD KNOW THAT

- -You must have a liking for public contact work;
- -You may be required to take some aptitude tests;
- -Salesclerking is the first job for a potential professional salesperson.

YOU MUST BE ABLE TO

- -Do basic arithmetic quickly and accurately;
- -Effectively meet and deal with the public;
- -Write legibly and spell well;
- -Create a good impression;
- -Do general office duties.

DOT 290.477-014

PREPARATION AND TRAINING:

Employers generally prefer to employ high school graduates for sales work. Those with some college training are always given preferences in most places.

RECOMMENDED HIGH SCHOOL SUBJECTS:

Business Math	Bookkeeping	Retailing
Typing	Sales	Work experience
Business English	Speech	General communication skills

ADDITIONAL FACTS ABOUT TRAINING

On-the-job training which may span a period of one to four months is the usual method of training in this occupation. You may be able to get some training by working part-time under a work experience program.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Salesclerks are employed anywhere from small shops to large department stores. There are many part-time jobs in this field, particularly in the Christmas season. Opportunities for salesclerks exist throughout the state.

ADVANCEMENT

Promotional opportunities are poor.

Most salesclerks do not advance.

MORE ABOUT THE JOB:

Salesclerk duties vary widely with the store in which they work. Most salesclerks, however, perform some general duties in varying degrees.

Salesclerks may rotate between working at the checkout stand and working on the floor.

Duties of the salesclerk involve:

-Computing the amount of purchase and tax;
-Collecting payments;
-Bagging merchandise;
-Rearranging merchandise;
-Re-shelving and restocking merchandise;
-Pricing and marking items.

It must be remembered that since many salesclerk openings are filled on a part-time basis, the job tends to become dead-end rather than a route to a better job.

JOB CLUSTER #11
"Marketing and Distribution"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	37½-40*	$3.60-$8.35/hr	$6.00/hr	$3.60/hr

*Some small communities may have 48 hour workweeks.

Salaries will vary with store size and geographic location. Check a local source for salary information in your area.

HOURS OF WORK
Most salesclerks work a forty-hour week. Some salespeople work regularly one or two evenings a week. Most workers take a day off during the week and work Saturday.

FRINGE BENEFITS
Depending on length and place of employment, you may receive:

overtime	health insurance
merchandise discount	paid holidays
paid vacation	retirement program

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Contact the personnel director of a local retail store for more information.

ADDITIONAL SOURCES OF INFORMATION:

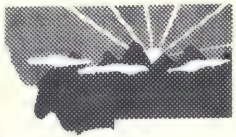
Your school counselor and librarian may also help you find additional information.

Sales and Marketing Executives International
Youth Education Division
630 Third Ave.
New York, N.Y. 10017

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Buyer, Stock	251.258-010
Purchasing Agent	162.158-102
Service Station Attendant	915.467-010
Warehouseperson	922.687-058

and others (see Dictionary of Occupational Titles)



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: SCHOOL BUS DRIVERS

SCHOOL BUS DRIVERS are responsible for the safe transportation of students between home and school, and on special trips which may be arranged by teachers or principals. They may be employed by a school district or by a transportation service which contracts with the school district.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Patient	Spatical	Eye-hand-foot coordination
Like Children	Clerical	Good reflexes
Tolerant	Manual dexterity	Good vision and hearing (natural or corrected)
Safety conscious		

YOU SHOULD KNOW THAT

You will not be considered if you have a record of serious traffic violations; any felony conviction will disqualify you for consideration; you will be expected to have a Red Cross first aid certificate; minimum age for employment is eighteen years; some districts prefer applicants who are over twenty-one; you must have a physical examination; some states require a school bus driver to have had a driver's license for five years.

YOU MUST BE ABLE TO

-drive a bus over a scheduled route according to an established time schedule.
-maintain order at all times and not allow unruly youngsters to get out of hand.
-show patience in the face of smart aleck tactics from some riders.

D.O.T. 913.463-010

PREPARATION AND TRAINING:

There is no standard minimum. However, most districts require at least completion of ninth grade. Completion of high school is preferred by most employers.

Districts have widely varying ways of training drivers. Many have training programs in which an applicant with no experience will be schooled in the mechanics of driving under supervision of a transportation supervisor or director or with an experienced driver.

This practice driving also may be accompanied by classroom study. Classroom work may include safe driving practices, school bus law, first aid, and record keeping.

Other districts expect the driver to know how to operate a bus.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITIES

Jobs for school bus drivers exist in communities of all sizes.
Both full-time and part-time jobs are available with the demand being greatest for qualified part-time drivers.
The general job outlook is good for the part-time driver.
Full-time positions are harder to obtain.
Usually the full-time driver will be required to perform some other duties besides driving, such as bus maintenance, and perhaps custodial duties.

OPPORTUNITIES FOR ADVANCEMENT

A part-time driver with a good driving record and work attitude may be hired as a full-time driver.

MORE ABOUT THE JOB:

The school bus driver's main assignment is to transport school youngsters safely to and from home and school, athletic events, on field trips, or other assignments as may be made by the principal, teacher, or transportation supervisor.
If drivers are full-time workers, they may also be responsible for minor mechanical work on buses and other school vehicles such as cars, trucks, and tractors.

Typical job duties include: driving a school bus over a designated route according to a time schedule; transporting students on special educational trips and to athletic events; keeping records such as bus mileage, fuel consumption, engine hours, student loads, and repairs made to the bus; replacing such items as lights, batteries, spark plugs, and points; adjusting such things as lights and brakes and checking bus for proper maintenance and safety requirements; lubrication and oil changes; cleaning of buses.

Normally the driver does not perform heavy maintenance, although during summer months, he/she may assist trained mechanics with the repainting, refurbishing, or overhauling of a bus.

In smaller districts, the bus mechanic may also serve as a driver, but the average driver is not required to be a skilled mechanic.

JOB CLUSTER #15
"Transportation"

SALARY INFORMATION

	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary

School bus driving is part-time work and salaries vary throughout the state. Some drivers are paid by the size of their route, others by the hour. Check with you local school district or transportation company for accurate salary information in your area.

HOURS OF WORK

Hours of work may vary according to the job. Most part-time drivers work about two hours in the morning and about two hours in the afternoon during the school year. Full time drivers may work from 6:30 or 7:00 a.m. to 4:30 or 5:00 p.m. with an extended lunch hour.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

- sick leave
- paid overtime
- paid vacation
- merit pay
- uniform allowance
- health insurance
- retirement plan

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Check with the personnel director of a local school system for further details.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.
Bus driver (motor trans.)	910.683-014
Transit operator (motor trans.)	913.167-014
Taxi driver	913.463-018

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: SEAMSTRESS

A SEAMSTRESS makes, alters, and repairs garments according to a pattern or customer's specifications, using a sewing machine or sewing by hand.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Patient	Numerical	Normal health
Precise	Spatial	Good vision
Accurate	Some mechanical	Good eye-hand coordination
		Full use of hands and fingers

YOU SHOULD KNOW THAT

- -Hazards include possible finger cuts;
- -Work areas may be cramped and somewhat noisy;
- -Handicapped people can do this work.

YOU MUST BE ABLE TO

- -Work for long periods of time sitting down;
- -Work with precision and accuracy;
- -Prefer working with tangible objects.

D.O.T 785.261-014

PREPARATION AND TRAINING:

You should be a high school graduate. On-the-job training is sometimes available.

RECOMMENDED HIGH SCHOOL SUBJECTS

- Sewing
- Home Economics
- Arithmetic

When available, a vocational dressmaking course is recommended.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities for dressmakers exist throughout the state.

There are as many opportunities for the private tailor as for working in retail shops.

ADVANCEMENT

Opportunities for advancement are limited.

Advancement may consist of mastering all aspects of the job and qualifying for top pay in a specialized area such as drapery seamstress.

MORE ABOUT THE JOB:

In a small shop, some of the work is done by hand and the fully qualified seamstress may perform several or all the steps. In larger shops, more machines are used and the seamstress does fewer things.

In addition to machines, most seamstresses use scissors, thimbles, pins and measuring sticks in their work.

Some seamstresses also do cutting and measuring regularly in addition to sewing. Some also block draperies and cover cornices.

Among various tasks performed by a seamstress are:

-Positioning and getting pattern sections on fabric;
-Cutting fabric with scissors;
-Basting and pinning fabric parts in preparation to final sewing;
-Sewing fabric parts together by hand or machine;
-Sewing falling stitch in hems;
-Pressing articles;
-Repairing articles by replacing parts and patching and darning;
-Lengthening and shortening garments.

JOB CLUSTER #5
"Consumer and Homemaking Education"

SALARY INFORMATION

	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	40*	$150-$180/wk	$160/wk	$150/wk

Salaries will vary from area to area, especially if there is union membership. You may wish to contact a local source for accurate salary information for your area.

*Both salaries and hours of work will vary with the self-employed seamstress.

HOURS OF WORK
Privately employed seamstresses make their own hours. Those working in a shop usually work forty hours per week. They may work Saturdays during rush periods.

FRINGE BENEFITS
Depending on place and length of employment, you may receive the following:

medical insurance	paid vacation	retirement plan
life insurance	paid holidays	

VV10579

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Amalgamated Clothing Workers of America
15 Union Square
New York, NY 10003

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Garment Fitter	785.361-014
Shop Tailor	785.361-022
Designer and Pattern Maker	781.381-026
Sample Stitcher	785.361-018

D.O.T. Fourth Edition, page 785

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: SECRETARY, GENERAL

SECRETARIES relieve the executive, for whom they work, of routine tasks. They are responsible for details of business which they must do independently without supervision. Some of the basic duties are typing, taking dictation and answering the telephone. A SECRETARY also performs such duties as appointments, reservations, correspondence, keeping records, filing and greeting clients.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Tactful	Numerical	Good general health
Discreet	Clerical	Normal vision (natural or corrected)
Self-disciplined	Verbal	Full use of hands and fingers
Poised	Mechanical	
Responsible	Finger dexterity	
Quick efficient work habits		
Accurate		
Good memory		

YOU SHOULD KNOW THAT

- -It is possible for people with physical handicaps to perform many tasks as a general secretary;
- -You will have many responsibilities and more duties than the other members of the clerical staff;
- -In some fields, terminology and work are very technical, thus general secretaries must possess specialized knowledge.

YOU MUST BE ABLE TO

- -Schedule appointments and be able to deal with the public;
- -Sit for long periods of time;
- -Be able to make routine administrative decisions;
- -Write legibly, spell, and use English correctly;
- -Think and act quickly under pressure;
- -Answer mail requiring routine decisions.

DOT 201.362-030

PREPARATION AND TRAINING:

Adequate performance as a general secretary requires a good basic education as well as technical training. Graduation from high school is essential for practically all positions. Training in college or private business schools will be helpful in securing good jobs.

RECOMMENDED HIGH SCHOOL COURSES:

English	Spelling
Filing	Arithmetic
Shorthand	Business Law
Typing	Business Machines
Bookkeeping	

ADDITIONAL FACTS ABOUT TRAINING

Most general secretaries have been promoted through the clerical ranks usually beginning as a stenographer. To qualify for positions with government, a person must be able to take dictation of at least 80 words per minute and type at least 40 words per minute.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

There are unlimited opportunities throughout the state.

Anyone with above average skills and abilities will have little trouble finding a job.

Openings are frequent due to the high turnover rate.

ADVANCEMENT

Opportunity for promotion may be high, depending upon type of business. Well-trained secretaries may advance to office supervisors, executive secretaries, or to administrative positions.

MORE ABOUT THE JOB:

Most general secretaries schedule appointments, give information to callers, take dictation, and otherwise relieve officials and executives of clerical work and minor administrative detail.

Specific duties will depend on the nature of the organization and the duties of the employer as well as other factors. Some specific tasks often performed by the secretary include:

-Reads and routes incoming mail;
-Locates files and answers correspondence as directed;
-Takes dictation;
-Types letters, forms, and other necessary papers;
-Answers the telephone and takes messages;
-Schedules appointments;
-Arranges travel schedules and reservations;
-Keeps records;
-Supervises other less skilled clerical workers;
-Keeps minutes of staff meetings;
-Arranges social functions;
-Provides information to callers in her/his office.

JOB CLUSTER #2
"Business and Office"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$769-$1343/mo	$900-$1000/mo	$769/mo

Because of varying rates of pay throughout Montana, specific information on salaries may be obtained at your nearby employment office.

HOURS OF WORK

The secretary normally works a 40 hour week. Overtime is seldom required.

FRINGE BENEFITS

Depending upon place and length of employment, you may receive:

health insurance	paid holidays	group life insurance
retirement plan	paid vacations	

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Employment Security Division
Box 1728
Helena, Montana 59601

ADDITIONAL SOURCES OF INFORMATION:

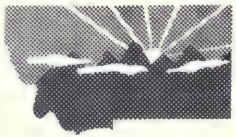
Your school counselor and librarian may also help you find additional information

National Secretaries Association
2440 Pershing Road, Suite G10
Kansas City, Missouri 64108

United Business Schools Association
1730 M. Street
Washington, D.C. 20036

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Legal Secretary	201.362-010
Medical Secretary	201.362-014
School Secretary	201.362-022
Technical Stenographer	202.362-014
Foreign Clerk	214.467-010



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: SECURITIES SALES AGENT

SECURITIES SALES AGENTS, employed by private brokerage firms, sell stocks, bonds and securities, give investment counsel and information, and provide related services to the public.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Poise	Numerical	Normally good health
Good judgement	Intelligent	Normal vision and hearing (natural or corrected)
Pleasant appearance	Clerical	Normal use of arms and hands
Attention to detail		
Integrity		

YOU SHOULD KNOW THAT

-A college degree is usually required for entry as a securities sales agent;
-Working conditions are pleasant, usually in a large office;
-Night and weekend work is normal, particularly for entering workers;
-Three months training in New York at employer expense is usual for entering sales agents.

YOU MUST BE ABLE TO

-Perform basic arithmetic calculations rapidly and accurately;
-Based on your knowledge of business generally and securities in particular, make rapid judgements regarding the effects of many variables on the performance of particular securities;
-Through verbal presentation to clients, inspire confidence in your ability;
-Motivate yourself and sustain your drive over long periods of time in the search for clients.

D.O.T. 251.157-010

PREPARATION AND TRAINING:

The securities sales agent must, in most cases, possess a bachelor's degree from a four-year college or university. A person may sometimes qualify for entry into this field with a combination of college and business experience.

RECOMMENDED HIGH SCHOOL COURSE:

A college preparatory program is recommended.

COURSE AFTER HIGH SCHOOL:

No specific major is recommended. A major within the broad field of business is often taken, but degrees outside the business field may be qualifying.

ADDITIONAL FACTS ABOUT TRAINING

Stock brokerage companies usually prefer to employ trainees in their middle to late twenties with a college degree and some business experience.

The United States Government Securities & Exchange Commission investigates all trainees for their record of financial responsibility and integrity. Those who do not have good records for paying bills and meeting other financial responsibilities cannot qualify.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Most securities sales agents are employed in the offices in large cities.

Opportunities in Montana are limited.

ADVANCEMENT

Promotion for most securities sales agents is in the form of increased earnings which come with experience in the business and larger numbers of clients.

MORE ABOUT THE JOB:

The indispensable and commonly known function of the securities sales agents is to act as the agent between the securities market and the individual or firm buying and selling securities. The duties involved in the actual transaction include two basic actions:

-The notification of the buy or sell order to the trading department of the brokerage firm;
-The notification to the buyer or seller that the transaction has been executed.

The majority of the securities sales agent's time is spent in contact with clients for the purposes of counseling and advising and in study and analysis of the securities market and the condition of the business world.

Given this knowledge of the securities market in the business world, the securities sales agent advises clients in terms of their investment objectives. Some investors are interested in conservative, safe investments for purposes of retirement benefits; some investors prefer to deal in higher risk securities which offer potential for larger, faster profits. After analyzing each client and being given specific goals, the securities sales agent tailors an investment plan accordingly.

JOB CLUSTER #12
"Marketing and Distribution"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	40	$25,000/yr and up		

Most entering agents begin as trainees and earn a salary for about a year. At the conclusion of a year, sales agents earn their money in the form of commissions on securities bought and sold for clients.

HOURS OF WORK
Most securities sales agents work a standard five-day week. Night and weekend work may be required in order to meet with clients after work.

FRINGE BENEFITS
Depending on length and place of employment, you may receive:

profit sharing plan
group life insurance
group health insurance
retirement benefits
flexible hours (for the established securities sales agent)

VV10579

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Contact a stock exchange office in your area.

ADDITIONAL SOURCES OF INFORMATION:

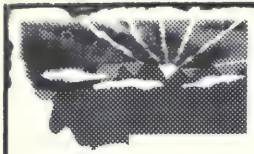
Your school counselor and librarian may also help you find additional information

Investment Bankers Association of America
425 13th St. N.W.
Washington, D.C. 20004

New York Stock Exchange
11 Wall Street
New York, New York 10005

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Sales Agent, Business Services	251.357-010
Sales Representative, Franchise	251.357-022
Sales Agent, Insurance	250.257-010



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: SERVICE STATION ATTENDANT

SERVICE STATION ATTENDANTS perform duties at an automobile service station as requested by customers. They supply cars or trucks with oil, water, air and gasoline; change oil and lubricate vehicles; sell tires, light bulbs, batteries and other parts; and install such accessories as windshield wipers, rearview mirror and spark plugs. They also change and repair tires and may also wash automobiles brought in for service.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Friendly	Verbal	Normal hearing & vision
Tactful	Mechanical	(natural or corrected)
Courteous	Numerical	Good general health
Pleasant	Some clerical	Full use of hands & legs
Neat & Organized		Physical stamina

YOU SHOULD KNOW THAT

-A service station attendant must have a driver's license;
-He/she works out of doors in all kinds of weather;
-He/she frequently works at night and on weekends and holidays;
-He/she is in almost constant contact with the public;
-Cuts, bruises, and burns are hazards of the job.

YOU MUST BE ABLE TO

-Withstand strenuous activities such as lifting;
-Stand or walk for longer periods of time;
-Endure frequent bending, stooping, and reaching;
-Work in clothes and with hands that are dirty and greasy;
-Do simple math calculations quickly and accurately.

DOT 915.467-010

PREPARATION AND TRAINING:

You should be a high school graduate. Service station attendants are usually trained on the job.

Most major oil companies give schooling to trainees before assigning them to a station.

Vocational schools throughout the state offer curriculums in automotive mechanics which would be helpful in obtaining a job.

RECOMMENDED HIGH SCHOOL SUBJECTS:

Auto Mechanics	English
Business Management	Electricity
Metal Shop	Speed Mathematics

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

There are opportunities for service station attendants throughout the state.

Opportunities are greatest in population centers.

ADVANCEMENT

Opportunities to advance are somewhat limited.

Many oil companies provide the opportunity for top employees to open their own station on a franchise arrangement.

MORE ABOUT THE JOB:

Specific duties of a station attendant include:

-Pumping gas;
-Adding and changing oil;
-Cleaning windshields;
-Checking batteries, tires, fan belts, oil filters, and other parts;
-Rotating and changing tires;
-Installing mufflers;
-Charging batteries;
-Selling necessary parts and miscellaneous accessories;
-Collecting payments;
-Performing minor maintenance and repair work;
-Keeping the service area building and restrooms clean and neat;
-Helping take inventory and set up displays;
-May drive a tow truck to aid stalled cars or change flat tires or tow the stranded car back to the service station.

You should know that except for high traffic service stations, the profit is made on performing mechanical services such as oil changes, lube jobs, and tune-ups. Pumping gasoline only is not enough to keep most service stations operating on a profit.

JOB CLUSTER #15
"Transportation"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	40-48	$550-$625/mo	$600-$700/mo	$550/mo

Because of varying rates of pay throughout Montana, specific information on salaries may be obtained at your local employment office.

HOURS OF WORK
The forty-hour workweek is normal. Weekends and evening work is common. You may be required to work holidays and night shifts.

FRINGE BENEFITS
Depending on length and place of employment, you may receive:

accident insurance
health insurance
profit sharing
paid vacations
commission on products sold

VV10579

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Stop at a local station and talk to the attendant.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Automotive Service Industry Association
168 North Michigan Avenue
Chicago, Illinois 60601

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Dock hand	911.364-014
Trailer-rental clerk	295.467-022
Rental clerk	295.357-014
Tire servicer	915.684-010
Auto mechanic	620.261-010

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB:

SERVICE WRITER or SERVICE ADVISOR
(D.O.T. - AUTOMOBILE REPAIR SERVICE ESTIMATOR)

The SERVICE WRITER in a new car agency greets customers who are having problems with their cars, takes a list of the items the customer wants fixed, and prepares a work order for the mechanic.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Tactful	Verbal	At least average health
Courteous	Mechanical	Average vision and hearing (natural or corrected)
Dependable	Clerical	
Neat appearance	Numerical	
Able to deal with people		

YOU SHOULD KNOW THAT

- -Most service writers have had some prior mechanical experience;
- -Most job opportunities are found with large car dealers whose service departments handle hundreds of customers a day;
- -You may be required to join a union.

YOU MUST BE ABLE TO

- -Talk with all kinds of customers including those who may be upset because of a mechanical problem and be polite at all times;
- -Diagnose a wide variety of common mechanical problems in cars and trucks;
- -Write legible, accurate descriptions of the mechanical problems so the mechanic can proceed quickly with the work.

D.O.T. 620.261-018

PREPARATION AND TRAINING:

There is no formal educational minimum. However, most dealers prefer applicants who have completed high school.

There is no requirement that a service writer have education beyond high school. However, if you are thinking of moving into service management after getting experience on the job, there are many courses which can be of value. These can be taken during a regular college day program or through night schools in most cases:

Automotive Repair and Tune-up	Engine Overhaul
Supervisory Training	Business Administration
Sales Psychology	Customer Relations
Automotive Electronics	Economics

ADDITIONAL FACTS ABOUT TRAINING

Much of the training will come on the job. Some agencies have their own training programs for service writers which include dealing with the public as well as mechanical diagnoses.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Service writers are found in most large new car dealerships and in a few general repair shops.

In smaller dealerships, the service manager or assistant manager usually acts as the writer.

For this reason, most employment opportunities exist in cities of 50,000 and up.

ADVANCEMENT

The service writer sometimes comes from the mechanics' or parts' division.

MORE ABOUT THE JOB:

The service writer is a combination receptionist, salesperson, mechanic. The job is to meet customers whose cars have service problems, to diagnose the problem, and to sell the customer on the necessary repairs.

The typical service writer may:

- -Greet the customer and inquire as to the nature of the visit to the shop;
- -Write out a service order, noting owner's name, address, and phone number, car license, engine number, and the mechanical problems to be corrected;
- -Diagnose troubles described by the car owner;
- -Take the car for a test drive with or without the owner;
- -Give the customer a rough estimate of repair costs if not covered by a guarantee;
- -If covered by a guarantee, obtain guarantee card, mileage, and other pertinent information;
- -Arrange transportation for the car owner if the car must be left in the shop;
- -Make sure the car is ready for the customer when promised;
- -Test drive the car to make sure all repairs have been completed.

The qualified service writer must be both mechanically inclined as well as having a knack for dealing with people. While most of the contacts are pleasant, the ability to handle angry customers, demonstrate tact and patience, be an attentive listener and a good conversationalist is very important.

JOB CLUSTER #15
"Transportation"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$7.00-$8.50/hr	$7.75/hr	$7.00/hr

Salaries may vary throughout the state. Check a local source or union for accurate salary information.

HOURS OF WORK

The standard workweek is forty hours. A few shops are open Saturdays, but most work Monday through Friday.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

sick leave	paid holidays	retirement plan
paid overtime	health insurance	discounts on service
profit sharing		

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Check with local new car dealer.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Automotive Service Industry Association
444 North Michigan Avenue
Chicago, Illinois 60611

Automotive Service Councils of America, Inc.
Industrial Drive, Suite 112
Elmhurst, IL 60126

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Automobile Mechanic	620.261-010
Automobile Tester	620.261-014
Mechanical-Maintenance Supervisor	638.131-026
Motor and Chassis Inspector (auto mfg.)	806.281-042

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: SHEET METAL WORKER

SHEET METAL WORKERS and apprentices work from blueprints and drawings. The journeyman sheet metal worker performs all the operations necessary to make and install articles of light gauge sheet metal.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Alert	Mechanical	Good physical condition
Dependable	Numerical	Good eyesight and hearing (natural or corrected)
Able to take directions	Some clerical	Good coordination
Good attitude	Spatial	Manual dexterity

YOU SHOULD KNOW THAT

-Before becoming a journeyman you must serve an apprenticeship;
-Apprenticeship standards are rigid and prospective workers should be aware that they will be screened thoroughly before being hired.

YOU MUST BE ABLE TO

-Work in noisy and occasionally dirty, greasy conditions;
-Work where fumes from welding and soldering operations are frequently present;
-Work in confined areas, often in awkward positions and sometimes in high places.

DOT 804.281-010

PREPARATION AND TRAINING:

The prospective sheet metal worker must have a high school diploma or the equivalent in education to be eligible for apprenticeship. The bulk of job training comes through formal apprenticeship training. The potential sheet metal worker can benefit from college training.

RECOMMENDED HIGH SCHOOL SUBJECTS

Mechanical Drawing
Math
Metal Shop

ADDITIONAL FACTS ABOUT TRAINING

A joint (union, management) apprenticeship committee receives applicants for apprenticeship, interviews applicants and evaluates their qualifications. Education past high school is a valuable asset and counts in your favor with apprenticeship committees.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Sheet metal workers and apprentices are found: in urban areas, in shipyards and railroad yards, working for sheet metal contractors and subcontractors.

The number of sheet metal workers has not grown significantly; the lack of growth is partly explained by increased use of prefabricated sheet metal products which are manufactured on a production line by semi-skilled workers.

ADVANCEMENT

The well qualified sheet metal worker may be promoted to layout person, supervisor, or plant superintendent.

Some journeymen become estimators and some contractors.

MORE ABOUT THE JOB:

Sheet metal workers fabricate and install ducts which are used in ventilating, air conditioning, and heating systems. They also fabricate and install a wide variety of other products made from thin metal sheets such as roofing and siding, commercial stainless steel kitchen equipment, partitions, sheet metal shelves, storefronts, metal framework for neon signs, and chutes used for materials movement.

Sheet metal workers lay out the work from blueprints or drawings, use shop mathematics to calculate measurements and determine angles, and mark the stock to be worked. They fabricate the parts of a sheet metal assembly by cutting sheet metal and barstock with hand or power shears curving the metal or shaping it into tubes with forming machines, and bending it to specified angles with a hand or machine brake. They drill or punch holes with a hand drill, drill press, or punch press. They assemble parts, join seams and attach hangers, brackets and reinforcements by welding, soldering, bolting, or riveting them together and smoothing rough joints or surfaces with a file or grinding wheel. They install the completed unit by welding, bolting, screwing, or nailing it into place, frequently working from scaffolds and ladders.

Many sheet metal workers specialize in one phase of the trade. A journeyman may become a specialist in working with plastics or become a gutter worker, or an expert in air conditioners.

JOB CLUSTER #4
"Construction"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary

$13.00/hour Journeyman Worker

Salaries may vary. You may wish to check with your local union for salary information, fringe benefits and apprenticeship programs.

HOURS OF WORK

The normal workweek is forty hours, Monday through Friday. Overtime is rare.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

- paid vacations
- hospitalization plan
- retirement plan
- paid holidays

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

The local office of the employment service may provide further information.

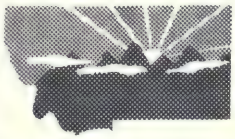
ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Sheet Metal and Air Conditioning Contractors National Association, Inc.
8224 Old Courthouse Rd.
Tyson's Corner
Vienna, VA 22180

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Boilermaker	805.261-014
Fitter (any ind.)	801.261-014
Forge-shop machine repairer	626.261-010
Patternmaker, metal bench	693.281-018



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: SHERIFF'S DEPUTY

The SHERIFF's DEPUTY performs much the same duties as a police officer, but is mainly responsible for law enforcement in areas outside the city limits, usually within county borders.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Courage	Verbal	Good general health
Dependable	Clerical	Good vision and hearing
Neat appearance	Spatial	No handicaps
Willing to take orders		Height and weight in proportion
Interest in helping others		

YOU SHOULD KNOW THAT

-You face danger from many sources;
-You must have a safe driving record;
-You must be twenty-one years old to qualify for employment.

YOU MUST BE ABLE TO

-Act quickly in times of stress;
-Learn to use firearms and other equipment effectively, yet with restraint;
-Work under a strict set of department rules and regulations;
-Learn to solve crimes from evidence at the scene and interviews with witnesses.

DOT 377.263-010

PREPARATION AND TRAINING:

Completion of high school is the minimum requirement. However, in more and more sheriff's offices, preference is being given to those who have had some police science courses.

RECOMMENDED HIGH SCHOOL SUBJECTS:

Math
Science
Physical Education
Typing
English

COURSE OF STUDY AFTER HIGH SCHOOL:

English
American History
Civics and Government
Business Law
Psychology
Physical Education
Sociology
Physics
Police Science and Criminology Courses

Police Science courses are offered at Dawson Community College in Glendive, Montana; College of Great Falls, Great Falls, Montana; and Montana State University, Bozeman, Montana.

Many sheriff's departments conduct their own inservice training programs.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

There are some opportunities throughout the State of Montana. Opportunities will be best in rapidly growing areas where the population growth brings more crime problems. Replacement needs are about 70 per year.

ADVANCEMENT

Normally, a deputy is hired on probation which may last six months to a year. At the end of this period, if he/she has done well, he/she can advance in salary over a five-year period. With experience and training, he/she may be promoted to sergeant, and although the openings are limited, may continue up the ladder to lieutenant or captain.

MORE ABOUT THE JOB:

A sheriff's deputy performs a variety of law enforcement duties in many ways like those of a police officer. He/she may:

-Drive a patrol car on routine patrol in an assigned beat area, regularly checking known trouble spots or buildings which have been the frequent targets of burglars;
-Respond to crime scenes;
-Interview victim, witnesses, gather evidence, make reports;
-Give first aid to victims in assault cases;
-Summon a doctor, ambulance, or coroner;
-Arrest, search, and interrogate suspects in criminal cases.

Unlike the average police officer, the sheriff's deputy does not ordinarily write a great number of traffic citations or investigate many accidents, although he/she may do both of these things some of the time.

The sheriff's deputy may act as a jailer, and in many counties, beginning officers start out in the jail division of a sheriff's office. The deputy books criminal suspects obtaining necessary information for jail records, searches them, hands out jail clothing, and escorts prisoners to the cell. The deputy may also act as a court bailiff, making sure law and order is maintained in the courtroom and opening and closing court sessions and keeping some records.

He/she may work on a rescue unit helping free motorists trapped or pinned in wrecks, conduct underwater searches or searches for lost persons or escaped criminals.

JOB CLUSTER #14
"Public Services"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$13,200-$18,000/yr	$16,500/yr	$13,200/yr

Salaries may vary throughout the state. Check with your local police station or sheriff's office for specific information.

HOURS OF WORK

The basic workweek is forty hours. However, emergencies and workloads may cause considerable overtime. Work is usually on a rotating shift basis, days, swing shift, and graveyard shift. Days off may be split. Officers sometimes work up to two weeks without a day off, then may get three or four days off in a row.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

- paid vacations
- paid holidays
- sick leave
- retirement plan
- life and health insurance
- uniform allowance

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Visit the local city police chief or nearest county sheriff.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

International Association of Chiefs of Police
1319 18th Street N.W.
Washington, D.C. 20036

National Sheriff's Association
Suite 320
1250 Connecticut Avenue
Washington, D.C. 20036

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Bailiff	377.667-010
Detective	376.367-014
House Officer	376.367-018

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: SHIPPING AND RECEIVING CLERK

SHIPPING AND RECEIVING CLERKS do the clerical work necessary to enable manufacturing companies, wholesalers, and other business firms to keep track of goods transferred on outgoing shipments. They also check and record the information on the arrival of merchandise.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Dependable	Clerical	Good general health
Accurate	Numerical	Use of both arms and hands
Honest		
Able to take orders		Eye-hand coordination
Precise		Normal vision

YOU SHOULD KNOW THAT

-most employers prefer a candidate with a neat, well-groomed appearance;
-you may be asked to join a union in some firms;
-you can advance to better jobs if you show interest and ability on the job.
-you will receive some on-the-job training in procedures and skills.

YOU MUST BE ABLE TO

-operate a typewriter and adding machine;
-pack and unpack goods with care to avoid breakage;
-accurately record information about shipments delivered and received;
-work indoors and out, sometimes in cold or hot weather;
-lift occasionally heavy objects onto carts, dollies, or trucks.

D.O.T. 222.387-050

PREPARATION AND TRAINING:

High school graduates are preferred for beginning jobs in shipping and receiving departments, although many employers hire applicants without high school diplomas.

HIGH SCHOOL SUBJECTS

Business Arithmetic, Typing, and other high school business subjects are helpful in preparing for this occupation.

COURSE OF STUDY AFTER HIGH SCHOOL

The shipping and receiving clerk does not need school beyond high school. However, some college will increase chances of getting a better paying job or a promotion from your present job.

ADDITIONAL FACTS ABOUT TRAINING

On-the-job training is given to beginners under the supervision of an experienced clerk. Beginners often start by doing routine work such as checking addresses, attaching labels, and checking the items included and filing. When hiring previously trained clerks, some employers require experience in handling specific types of goods, such as electronic parts, glassware, or garments. This kind of specialized experience is most important in aircraft and aerospace plants.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Competition for these jobs may be keen since this kind of work requires relatively little specialized training. Opportunities throughout the state of Montana are limited.

ADVANCEMENT

The normal lines of promotion are to:
head clerk
traffic clerk
buyer
warehouse manager
traffic manager
purchasing agent

MORE ABOUT THE JOB:

A shipping and receiving clerk may
- -keep records of all shipments sent out
- -keep records of all merchandise received
- -work under the supervision of a head clerk or warehouse manager
- -check to make sure customer's order is filled out properly
- -type or print the invoices
- -look up freight or postal rates
- -record postal rates on invoice
- -check addresses
- -requisition orders from stockroom
- -check orders to make sure all merchandise has been packed
- -wrap and package shipment
- -direct shipments onto company trucks
- -check condition, quality and quantity of merchandise received
- -unpack items
- -check items against original order form
- -maintain records of incoming items, dates of arrival
- -process shipments to final destination and warehouse
- -work inside or outside
- -work in a warehouse, shipping or receiving room, or on a loading dock
- -get glue or ink on clothes
- -stand for long periods
- -be required to lift relatively heavy objects such as packaged crates
- -use machines such as typewriters and adding machines

JOB CLUSTER #3
"Business and Office"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	Salary range is $725-$1000 per month		

Salaries may vary throughout the state. You may wish to check a local source for accurate salary information in your area.

HOURS OF WORK

The forty-hour workweek is standard and most places pay time and a half for overtime when it is necessary. Work on Saturday is common and Sundays and holidays may be required occasionally if there is a special shipment to come in on these days.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

overtime pay	illness benefit	life insurance
paid vacation	profit sharing	health insurance
retirement plan	employee discount	sick leave

VV10579

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Employment Security Division
Box 1728
Helena, Montana 59601

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Office Occupation Unit
Division of Vocational and Technical Education
Bureau of Adult Vocational and Library Program
U.S. Office of Education
Washington, D.C. 20202

RELATED OCCUPATIONS:

JOB TITLE:	D.O.T.#:
Freight clerk (r.r. trans.)	222.387-050
Shipping checker (aircraft mfg.)	222.687-030
Follow-up clerk (elec. equip.)	221.367-018
Stock clerk	222.387-058
Parts clerk	222.367-042

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MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: SHOE REPAIRERS

SHOE REPAIRERS mend worn heels and soles, broken straps, and torn seams of shoes. They also restyle shoes by attaching ornaments such as buckles and bows.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Dependable	Numerical	Form perception
Accurate	Spatial	Good vision (natural or corrected)
Careful	Some mechanical	Eye-hand coordination
Efficient		Finger dexterity
Good work habits		

YOU SHOULD KNOW THAT

-Your working conditions are usually crowded and in a noisy area;
-You will be subject to strong odors from leather goods, dyes, and stains;
-Working area may be poorly lighted and ventilated.

YOU MUST BE ABLE TO

-Stand for long periods of time;
-Learn and apply craft techniques;
-Be able to use independent judgement and assume responsibility.

D.O.T. 365.361-014

PREPARATION AND TRAINING:

This job has no specific educational requirements. High school education is not necessary to enter this occupation; however, the high school graduate probably will have an advantage over non-graduates who apply for the same job.

Many trade and vocational schools teach this trade, but graduates are not considered thoroughly trained until they have had practical experience.

RECOMMENDED HIGH SCHOOL CLASSES:

English
Social Studies
Math
Shop classes

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

At present, the need for shoe repairers is limited throughout the state.

Little change in demand is expected during the next ten years.

Growth in this occupation is limited due to the increasing popularity of canvas footwear, loafers, sandals, and cushion-soled shoes which often cannot be repaired.

ADVANCEMENT

Skilled shoe repairers who work in large shops can advance to shop supervisors or managers.

MORE ABOUT THE JOB:

Most shoe repairers are hired as helpers and learn the trade after about two years of on-the-job training. Helpers begin by assisting in simple tasks such as staining, brushing, and shining shoes.

Over sixty percent of shoe repairers are proprietors of small shops.

Self-employed shoe repairers have managerial duties in addition to shoe repair. They make estimates of repair costs, prepare sales slips, keep records, and receive payments for work done.

The most frequent task performed by a shoe repairer is replacing worn heels and soles. The sole is replaced by removing both it and the old stitching and roughing the bottom of the shoe on a sanding wheel. Next, a new sole is selected or cut from a piece of leather and cemented, nailed, or sewed to the shoe. The same operation is used in replacing worn heels. Finally, the new articles are stained and buffed to match the color of the shoe.

JOB CLUSTER #13
"Personal Services"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40-48	$175-$250/wk	Managers may earn $300/wk	

You may wish to check a local source for salary information in your area.

HOURS OF WORK

The workweek usually is forty to forty-eight hours. Some shops are open on Saturdays.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

- paid vacation
- paid holidays
- retirement plan
- medical insurance
- life insurance

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Check the yellow pages for a local shoe repair shop.

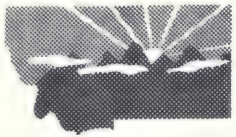
ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Shoes Service Institute of America
222 West Adams Street
Chicago, Illinois 60606

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Luggage repairer	365.361-010
Carpet cutter	781.684-010
Drapery operator	787.682-018
Patternmaker	781.381-026
Caster (jewelry)	502.381-010



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: SHOE SALES ASSISTANT

The SHOE SALES ASSISTANT sells all kinds of footwear, either for independent retail merchants, chain shoe outlets or department stores.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits
Dependable
Aggressive
Neat appearance
Good attitude
A liking for people

Aptitudes
Verbal
Clerical
Some numerical

Physical Abilities
At least average health
Full use of hands and feet
Good color vision
Average hearing

YOU SHOULD KNOW THAT

-There are many part-time jobs available in this field for students who can demonstrate a good attitude and the ability to learn;
-You will be expected to have a good command of business math necessary for writing accurate sales tickets and for keeping necessary records and inventory control.

YOU MUST BE ABLE TO

-Work with all kinds of customers while maintaining a pleasant attitude;
-Learn about the many styles and types of footwear for people of all ages;
-Learn to fit customers having special foot problems;
-Quickly find the right size and style of shoe from a large stock.

D.O.T 261.357-062

PREPARATION AND TRAINING:

While there is no formal limit, most employers prefer permanent employees to be high school graduates.

RECOMMENDED HIGH SCHOOL COURSES:

Speech
English
Sales
Clerical Practices
Beginning Bookkeeping
Business Math
Art

YOU SHOULD KNOW THAT:

Valuable training may be available through a high school work experience program.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Shoe sales people are found in cities of all sizes.

There are jobs throughout the State of Montana.

ADVANCEMENT

The qualified, willing, and experienced worker may stay in the same store and work into a supervisory or managerial position.

MORE ABOUT THE JOB:

The shoe sales assistant is one of the many specialists in retail sales work. The assistant deals in footwear of all kinds and may also sell related apparel items.

The assistant may work in a department store, an all around shoe store, and in some cases, in special shops which deal in children's shoes, boots and work shoes or corrective shoes.

In the typical store or shoe department, the sales assistant may:

-Greet customers as they enter and inquire about the kind of footwear they need;
-Depending on the customer's response, show a particular style or let customers browse through the store;
-Measure the customer's foot size;
-Help the customer try on a variety of shoe styles;
-Offer an opinion as to which style is most attractive;
-Upon completing a sale, ask the customer if there are any items of apparel which they might desire;
-Prepare sales ticket, writing down clearly and accurately the style, stock number, size and price of the merchandise sold;
-Collect payment in cash or check or initiate charge account proceedings.

The sales assistant may also:

-Take continuing inventory of shoe stocks;
-Help keep the stockroom and shelves orderly and full;
-Arrange window and counter displays;
-Unpack goods shipped to the store and keep accurate records of shipments received;
-Keep track of defective items and ship them back to the distributor.

JOB CLUSTER #12
"Marketing and Distribution"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	40	$3.60-$8.35/hr	$6.00/hr	$3.60/hr

Salaries may vary throughout the state. You may wish to check a local source for accurate information in your area.

HOURS OF WORK

The standard workweek is forty to forty-eight hours, but hours of work may vary, particularly if you work for a company which is open several nights a week and/or on weekends. You may work weekends and have weekdays off. Part-time workers often put in fifteen to twenty-five hours a week.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

paid overtime	sick leave	profit sharing
paid vacation	health insurance	employee discounts
retirement plan	paid holidays	

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Check with a local shoe store to obtain more information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Sales and Marketing Executive International
Youth Education Division
630 Third Ave.
New York, N.Y. 10017

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Sales Representative, Canvas Products (whole tr.)	261.357-014
Salesperson, Men's Furnishings (ret. tr.)	261.357-054
Salesperson, Fashion Accessories (ret. tr.)	261.357-066
Sales Representative, Footwear (whole tr.)	261.357-018

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: SIGN PAINTER

SIGN PAINTERS use paint and brushes, silkscreen processes, or neon tubing to create advertising or commercial signs. They may apply paint directly to buildings or to metal, masonite, paper, or cardboard sign surfaces which then are erected into place.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Creative	Artistic	Normal good health
Dependable	Spatial	Good vision (natural or corrected)
Enthusiastic	Mechanical	Full use of arms, hands, fingers and thumbs
Pride in work		A good eye for color
Good judgement		
Attention to detail		

YOU SHOULD KNOW THAT

-You must have a good sense of balance and be unafraid of heights;
-Art training and ability is a must for the pictorial sign painter;
-Knowledge of geometry and mechanical drawing are very important to the neon sign painter.

YOU MUST BE ABLE TO

-Work rapidly and accurately;
-Sit or stand for long periods of time;
-Lift and climb;
-Accept criticism gracefully;
-Work under pressure;
-Show initiative on the job.

D.O.T 970.381-026

PREPARATION AND TRAINING:

High school graduation is preferred by all employers and required by most.

Union apprenticeship programs are sometimes available although usually difficult to get into.

RECOMMENDED HIGH SCHOOL SUBJECTS

Art
Math
Wood Shop
Drafting
Electricity
English
Metal Shop

COURSE OF STUDY AFTER HIGH SCHOOL

Many schools offer commercial art courses which include graphic arts, basic drawing, color and design, lettering, and other skills.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Sign shops are found in cities of all sizes; however, most sign painters are employed in the larger metropolitan areas.

There are opportunities throughout the state but they are limited.

ADVANCEMENT

Apprentice sign painters advance to journeymen.

Some are promoted to supervisor.

Because many shops are small, opportunities for advancement are limited.

MORE ABOUT THE JOB:

Sign painters usually fall into five general categories: commercial, outdoor advertising, neon electrical, silk screen or show card.

Many sign painters specialize in such work as: gold leaf, real estate signs, truck lettering, show cards, commercial signs such as wood or metal signs attached to buildings, signs painted on walls and windows, or banners.

Sign painters usually work on the following type of surfaces: metal and wood, masonite paper or cloth canvas.

Sign painters work from handwritten instructions using the following procedures: if it is a single sign, they lay out the work directly on the sign surface; if duplicates are needed, they make the full pattern which is applied to sign surfaces; for outdoor signs, they may work from a color photograph or an original sketch and project the image onto paper stretched on a wall and make a pounce pattern; for neon and electrical signs, they will paint the backgrounds and make patterns for the sheet metal workers and glass tube benders; since metal leaf lettering is the most highly skilled task a sign painter can perform, they design and attach letters of 22-carat gold to the surface, usually glass, in such a fashion that it cannot be easily detached.

The sign painter uses many types and sizes of letters, must know the properties of various materials on which the work will be done and may have to furnish their own equipment.

JOB CLUSTER #7
"Fine Arts and Humanities"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$140-$360/wk	$210-$310/wk	$140/wk

Salaries may vary throughout the state. You may wish to check a local source for accurate salary information for your area.

HOURS OF WORK

The forty-hour workweek is standard. Most sign painters do not work Saturdays. The hours of work depend greatly on the size of the shop, the number of workers employed and the individual employer.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

- paid vacations
- paid holidays
- retirement plan
- health insurance
- paid overtime
- sick leave

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LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Your local employment service should be able to provide further information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Outdoor Advertising Association of America
24 West Erie Street
Chicago, Illinois 60610

National Art Education Association
1201 16th NW
Washington, D.C. 20036

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Retoucher, photo engraving	970.381-030
Painter, animated cartoons	970.681-026
Document restorer	979.361-010
Letterer (profess. and kin.)	970.661-014

D.O.T. Fourth Edition, page 932

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: SMALL APPLIANCE REPAIR WORKER

SMALL APPLIANCE REPAIR WORKERS, work in shops and customer's homes, repairing small appliances such as toasters, coffee makers, irons and others.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Responsible	Mechanical	Normal health
Accurate	Numerical	Good vision and hearing (natural or corrected)
Honest		Good eye-hand coordination
Attention to detail		Full use of hands and arms

YOU SHOULD KNOW THAT

- -interested people with some handicaps of the legs and feet may qualify providing they can perform the work
- -one or more years of training on-the-job are usually required to fully qualify as a small appliance repair worker.
- -hazards are few, but include electric shocks from appliances
- -safety rules and procedures have limited most serious hazards

YOU MUST BE ABLE TO

- -use several small hand tools accurately and correctly
- -on most jobs, drive a small truck
- -work while sitting and standing for long periods of time
- -deal with customers in a shop and sometimes in their homes
- -figure out causes of small appliance failures on the basis of your knowledge of electrical principles

DOT 723.381-010

PREPARATION AND TRAINING:

There are no educational standards for the small appliance repair worker. However, high school graduation is recommended. Training past high school in electrical theory and practice will increase employment opportunities. Most small appliance repair people receive about two years of on-the-job training.

COURSE OF STUDY:

High School: Classes in electricity and other shops, basic arithmetic and physics provide good preparation.

College: Classes in all aspects of electricity, mathematics and blueprint reading are available.

One-the-job: Including practice (under supervision) in repair work. On-the-job training may also include correspondence courses and night classes.

Experienced service workers continue to attend training classes periodically, and study service manuals to become familiar with new appliances and the proper ways to repair.

The Billings Vocational Technical Center has a course in air conditioning and refrigerator repair which also includes small appliances.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Small appliance repair people are employed by appliance repair shops, appliance departments or appliance stores and by appliance manufacturer service outlets.

There are opportunities for well-trained people throughout Montana.

ADVANCEMENT

Those who work for appliance service companies can advance to jobs as supervisors, assistant service manager and service manager.

MORE ABOUT THE JOB:

Small appliance repair people, using their knowledge of the workings of small appliances, figure out why appliances won't work and repair them. They work on appliances such as toasters, coffee makers, irons, electric roasters and others. They usually do not work on washing machines, freezers and other large appliances.

Most of the work of the small appliance repair person is done in the shop after customers bring in defective appliances.

Some appliance repair people typically use a number of tools and instruments in the course of their work. Some of these are:

-screwdrivers
-wrenches of several types
-welding equipment
-circuit testers of other types
-soldering irons
-ohmmeters
-voltameters
-manometers
-pliers
-wattmeters

Using hand tools and working at a bench, the small appliance repair person will likely dissemble the appliance to be repaired. He/she may then apply various meters and measuring instruments to the circuits and other parts in question. When the trouble is located, the repair person then replaces parts, solders connections, or performs whatever repairs or adjustments are necessary and checks other features of the appliance to insure that everything is in proper and safe working order.

JOB CLUSTER #14

"Public Services"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$150-325/wk	$180-260/wk	$150/wk

Salaries may vary throughout the state. You may wish to check a local source for salaries in your area.

HOURS OF WORK

A forty-hour workweek is standard. Many workers work an additional four hours on Saturday mornings.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

-paid vacation
-paid holiday
-hospitalization insurance
-premium pay for overtime

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Contact local appliance stores found in the yellow pages of the phone book.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Institute of Appliance Manufacturers
2000 K Street, NW
Suite 455
Washington, D.C. 20006

RELATED OCCUPATIONS:

JOB TITLE:	D.O.T.#:
Model maker, fluorescent lighting	723.361-010
Vacuum cleaner repair	723.381-014
Coil-unit builder	724.684-026
Developmental electronics assembler	710.281-018
Cable layout worker (elec. equip.)	728.684-010

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MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: SOCIAL WORKER

A SOCIAL WORKER is usually employed by a school, hospital, health agency, rehabilitation center, or government agency to provide some groups, families and individuals with assistance in solving their problems. These problems may include poverty, unemployment, alcoholism, physical or mental handicaps, inadequate housing or medical care and lack of recreational facilities. The well trained Social Worker is familiar with community resources and with many problems. A Social Worker may specialize and work only with persons with psychiatric problems, juvenile delinquents, or programs for the aged or in family welfare services.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Poise	Verbal	Normally good health
Tact	Numerical	Normal vision and hearing (natural or corrected)
Self-confidence		Absence of distracting speech problems
Honest		
Orderly work habits		

YOU SHOULD KNOW THAT

Generally, in order to enter the field of social work, a four year college degree is required and, in more specialized and professional areas, the Master's degree, MSW is required. In recent years PH.D. and DSW degrees are becoming more common. Social workers generally operate out of their own offices or agencies. Often times it is necessary for them to go into the community for family interviews.

YOU MUST BE ABLE TO

-formulate action plans for the good of clients based on relationships between social work concepts and information on each individual case
-think and act objectively in distressing situations and in visits with troubled people
-inspire confidence in clients, and motivate them to solve their own problems
-maintain your objectivity when dealing with clients and their problems.

D.O.T. 195.107-010

PREPARATION AND TRAINING:

The social worker must initially have at least a B.A. degree from a college or university. In some instances it is necessary for the social worker to have a Master's degree, MSW. As in most fields, experience is always an advantage in looking for employment.

COURSE OF STUDY

High School: A college preparatory program including math, science, a foreign language and social studies is recommended.

College: A major in sociology, social work, psychology or another social science is usually taken as an undergraduate program. The MSW degree is usually in social work. It is much more difficult to get employment with a Master's degree in sociology than with an MSW degree. The MSW degree gives much more clinical and practical experience whereas the degree in sociology is generally more theoretically oriented.

ADDITIONAL FACTS ABOUT TRAINING

Volunteer or paid part-time work in the summers and camp counseling, recreation with the YMCA or YWCA, and related experience will aid you in determining your aptitudes and interests in the social work field.

Though there are some jobs available for those with B.A. degrees, the competition continues to become more difficult.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities exist in many different agencies for those educated in the field of social work: County Welfare offices, schools, adoption agencies, probation and parole offices and other public and private social work organizations.

ADVANCEMENT

Advancement opportunities are best for those with the MSW degree.
Workers with advanced degrees may advance either by taking on more difficult social work tasks than their specialty, or by moving into supervision and administration.
Opportunities are fewer and slower for social workers without advanced degrees.

MORE ABOUT THE JOB:

Social workers usually specialize in one of several areas in the field. These specialties together with a brief description of each are:

Child Welfare: In cases of neglected, deprived and troubled children, the caseworker counsels and implements plans designed to alleviate causative factors.

Medical: Dealing with people with serious health problems, the medical social worker plans for the best use of available medical care and counsels regarding emotional problems which inhibit recovery. Much time is spent in hospitals and other institutions.

Psychiatric: Counseling emotionally ill clients and their families for better mutual understanding and treatment and planning for a professional treatment for clients is the concern of the psychiatric social worker.

School: The school social worker is concerned with school children who fail in social or academic adjustment. Counseling the child, parents and other school officials as well as treatment planning are all performed by the school social worker.

JOB CLUSTER #14

"Public Service"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$1100-1300/mo	$1250/mo	$1100/mo.

Salaries vary greatly depending on the area, education and job responsibility.

HOURS OF WORK

Most social workers average forty hours weekly, Monday through Friday. Some workers, particularly those employed by twenty-four hour institutions, may work nights and occasional weekends.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

- -paid vacation
- -retirement plan
- -group life insurance
- -group insurance
- -paid holidays

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Contact a social worker with the Welfare Department or any other social agency in your community for further information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

National Association of Social Workers
1425 H St. NW, Suite 600
Southern Building
Washington, D.C. 20005

Information on accredited graduate and undergraduate college programs in social work is available from:

Council on Social Work Education
345 East 46th St.
New York, NY 10017

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Parole Officer	195.167-030
Counselor	045.107-010

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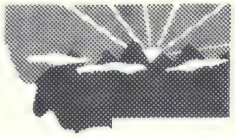

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: SOCIOLOGIST

SOCIOLOGISTS study human groups and the behavior of humans living together. They study the customs and government of tribes, families, communities, states and nations. The work of a SOCIOLOGIST depends largely upon their specialization. The primary concern of some SOCIOLOGISTS is how individuals are affected by the society in which they live; other SOCIOLOGISTS may be more interested in studying and analyzing general characteristics of social groups and institutions.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Curious about human behavior	Writing	Sit for many hours doing research
Ability to work with people	Speaking	Good eyesight and hearing
Ability to make sound judgements	Clerical	Physical stamina for field work
Good academic ability	Scientific	In general good health, mentally and physically
Like to learn		
Friendly and well organized		

YOU SHOULD KNOW THAT

- Most sociologists are college teachers; about 3/4 of all sociologists are employed in colleges and universities. The remainder work in federal, state, local or international government agencies, in private industry, in welfare or other non-profit organizations, or they may be self-employed;
- Young people with only a bachelor's degree in sociology are not usually recognized by the profession as sociologists, although they may secure jobs in a variety of positions.

YOU MUST BE ABLE TO

- Spend much time studying and doing research;
- Communicate results of research through necessary oral and writing skills;
- Work independently.

D.O.T 054.067-014

PREPARATION AND TRAINING:

A master's degree with a major in sociology usually is the minimum requirement for employment as a sociologist. The Ph.D. degree is essential for attaining a professorship in most colleges or universities, and is commonly required for directors of major research projects, important administrative positions or consultants.

Sociologists with master's degrees may qualify for many administrative and research positions, provided they are trained in research methods and statistics. Sociologists with the master's degree may also qualify for some college instructorships. Most colleges, however, appoint as instructors only people with training beyond the master's level--frequently the completion of all requirements for the Ph.D. degree except the doctoral dissertation.

Outstanding graduate students often can get teaching or research assistantships which will provide both financial aid and valuable experience.

Young people with only a bachelor's degree in sociology are usually not recognized by the profession as sociologists. However, they may obtain jobs as interviewers or research assistants working under close supervision, or as caseworkers, counselors, recreation workers, or administrative assistants in public and private welfare agencies. With sufficient training in statistics they could begin as statisticians. Those meeting state certification requirements may teach high school.

Students may prepare themselves while in high school by taking such courses as:

Psychology	Social Sciences	Anthropology
Sociology	English	History
Mathematics		

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Employment opportunities for sociologists are expected to continue to rise through the 1980's. Sociologists with only the bachelor's or master's degree will face considerable competition. Those with a good foundation in advanced statistics and research methods will have the most opportunities.

ADVANCEMENT

With more experience, sociologists can expect promotions to more responsible and supervisory positions. This usually means salary increases, too. Income can be supplemented by summer teaching, special research work, writing and consulting. Specialization in one special area is usually required. College instructors may advance to full professor, head of the department or an administrative position.

MORE ABOUT THE JOB:

Sociologists collect and analyze scientific data concerning social phenomena, such as the community, associations, social institutions, ethnic minorities, social classes, and social change. They may teach sociology, direct research, prepare technical publications, or act as consultant to lawmakers, administrators and other officials dealing with problems of social policy.

Some sociologists head welfare agencies or marriage and family clinics. Others may direct research teams. They may be hospital administrators or sociologists employed in government agencies. Sociologists also manage and administer nonprofit agencies such as settlement houses, youth clubs, community centers, and religious groups and organizations. The work of sociologists, however, differs from the duties of social workers.

Specializing sociologists include: Medical Sociologist, Industrial Sociologist, Criminologist, Penologist, Rural Sociologist, Social Sociologist, Social Pathologist, and Urban Sociologist.
See definitions: D.O.T. 4th Edition; page 51.

JOB CLUSTER #13
"Public Services"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
Vary	$12,000 - $26,000 annually		

Annual salaries for sociologists vary according to where they work: nonprofit organizations, industry, federal government, or universities (teaching).

HOURS OF WORK

The hours of work will vary depending largely on the type of sociologist. As a whole, sociologists work a normal forty-hour workweek; but they also spend much time studying and doing research.

FRINGE BENEFITS

These may vary with length and place of employment:

- Health and insurance benefits
- Welfare and retirement plans
- Vacations and sick leave
- Travel expense
- Worker's compensation and unemployment insurance

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LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Check with your counselor or career education teacher for additional information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

The American Sociological Association
1722 North Street Northwest
Washington, D.C. 20036

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Counselor	045.107-010
Social Worker	195.107-010
Librarians	100.127-014
Teachers	091.227-010

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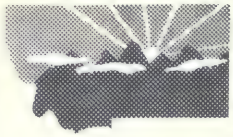

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: SOIL CONSERVATIONIST

The SOIL CONSERVATIONIST, in cooperation with farmers, ranchers, government agencies and urban people, collects and interprets facts about soil and water,plans for the needs of resource users, assists in on-site action to treat soil and water conservation problems and helps coordinate the available public and private assistance to resource decision makers to eliminate waste and duplication of effort.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Initiative	Verbal	Good general health
Enjoyment of outdoors	Scientific	
Precise	Mechanical	
Accurate		
Tactful		

YOU SHOULD KNOW THAT

- -Map reading and map making are required abilities;
- -A certain amount of geology and minerology is required;
- -You may be required to move frequently as job assignments change;
- -At least two years college is recommended for the conservationist aide, four years college is considered a minimum for professional conservationists.

YOU MUST BE ABLE TO

- -Identify potential erosion problems and recommend practical solutions;
- -Talk intelligently with farmers, ranchers and urban people about soil problems and conditions;
- -Work equally well alone or directly with people.

DOT 040.061-054

PREPARATION AND TRAINING:

Two years college is the minimum for conservationist aides. Four years college is required for professional conservationists.

RECOMMENDED HIGH SCHOOL SUBJECTS

Biology	Chemistry	Writing
Drafting	Speech	Basic Math
English	Physics	

COURSE OF STUDY AFTER HIGH SCHOOL

Geology	Chemistry	Forestry
Engineering	Surveying	Drafting
Range Management	Soils	Agronomy

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Jobs in the soil conservation field are limited in number.

Soil conservation jobs are primarily found in federal government service with the U.S.D.A.

There are some state government jobs and some opportunities in private industry.

Jobs are primarily in rural and, in some cases, wilderness areas.

ADVANCEMENT

The worker who begins as an aide may advance to a series of job titles up to and including regional supervisor.

Advancement, however, is much more likely for those with a college education, although experience and ability are also required.

MORE ABOUT THE JOB:

The soil conservationist and his/her aides help develop and maintain our soil and water resources to their highest and best use.

Some of the responsibilities of the soil conservationist are:

-Collecting and interpreting facts about soil and water for rural and urban use;
-Assisting farmers on sound land use practices;
-Helping solve problems created by runoff of rain and mountain snow;
-Assisting in planning of flood control projects;
-Developing soil and land use maps which help determine which erosion control and farm practices should be done;
-Helping layout engineering practices to reduce the hazards of flooding or erosion.

The professional conservationist is more likely to do less physical work and more analysis, planning, and public contact work.

The aide will do more physical work such as surveying, mapping, soil sampling, and testing.

Both the aide and the conservationist are in the field far more than the person who holds a normal office job.

JOB CLUSTER #1
"Agri-Business and Natural Resources"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary

Soil Conservationists with bachelor's degree and no experience are usually hired at GS-5 or GS-7 ratings, depending on college grades. Those with master's degrees may start at GS-7 or GS-9 rating.

GS-5 $ 8,500 - $11,047
GS-7 $10,520 - $13,679
GS-9 $12,841 - $16,693

HOURS OF WORK

Hours are fairly regular although some field work is done away from home. The workweek is Monday through Friday. Most field work is done in the spring, summer and fall. Many reports are written and rancher contacts made in winter months.

FRINGE BENEFITS

Depending on place and length of employment, you may receive the following:

paid vacation
health insurance
pension plan
sick leave

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LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Conservation Commission
Mitchell Building
Helena, Montana 59601

ADDITIONAL SOURCES OF INFORMATION:

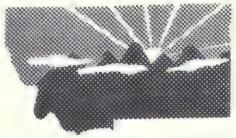
Your school counselor and librarian may also help you find additional information

U.S. Civil Service Commission
Washington, D.C. 20415

Department of Agriculture
Washington, D.C. 20250

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Agronomist	040.061-010
Forester	040.061-034
Horticulturist	040.061-038
Soil Scientist	040.061-058



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB:

SPEECH PATHOLOGIST

The SPEECH PATHOLOGIST or THERAPIST diagnosis, treats and does research on problems of speech and language. Most often, he/she is employed by a school system or by a private clinic to help pre-school children and adults.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Patient	Verbal	Good general health
Thorough	Numerical	Eye-hand coordination
Tactful	Some mechanical	Normal vision and hearing (natural or corrected)
		Excellent speech

YOU SHOULD KNOW THAT

- many speech pathologists are employed by elementary or secondary schools, but additional openings exist with colleges, hospitals, research centers, government agencies and industries
- an increasing number of states require a Master's Degree or its equivalent for speech pathologists and audiologists
- you must also have a knowledge of hearing problems because the fields are so interrelated.

YOU MUST BE ABLE TO

- get along well with others and win the trust and confidence of the people you treat
- show patience, compassion and emotional stability when working with persons with speech disabilities or defects
- learn, absorb and apply great amounts of scientific and technical knowledge.

D.O.T. 076.107-010

PREPARATION AND TRAINING:

In most states, a Master's Degree in Speech Pathology is the minimum requirement. Some employers, particularly industry and research clinics, may request a doctorate. If so, the salary is higher.

HIGH SCHOOL COURSES

A college preparatory course is recommended with particular emphasis on math and science.

COLLEGE COURSES

During the four-year undergraduate period, the candidate should pursue studies in anatomy, biology, physiology, physics, semantics, phonetics, child psychology and mental hygiene.

The University of Montana in Missoula does offer a degree in Speech Pathology and Audiology.

ADDITIONAL FACTS ABOUT TRAINING

Many colleges offer assistantships and traineeships during which time the student can gain practical clinical experience.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Well trained and qualified speech pathologists are in demand.

Opportunities are good for both sexes.

Opportunities are best with school systems, colleges and universities.

ADVANCEMENT

Advancement usually comes in the way of increased salary and added prestige from consultant work, special speech projects and writing books and articles for professional journals.

MORE ABOUT THE JOB:

The Speech Pathologist:

- diagnosis, treats and performs research related to speech and language disorders;
- treats impairments such as stuttering, aphasia, articulatory problems and cleft palate;
- plans, directs or conducts remedial programs designed to restore or improve communication efficiency;
- provides counseling and guidance to speech and language handicapped individuals;
- works in cooperation with other specialists such as audiologists, physicians, psychologists and physical therapists to correct an individual's deficiencies.

A Pathologist may:

- act as consultant to educational, medical or other professional groups;
- teach or direct scientific projects:
- conduct research;
- specialize in working either with children or adults.

JOB CLUSTER # 8

"Health"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$15,000-$21,000	$17,000	$15,000/yr

Salary range for teachers is often for a 9-10 month contract. Check your area for this information.

HOURS OF WORK

Most speech pathologists work a forty-hour week with regular 8 to 5 hours. However, pathologists engaged in research may work longer hours and on weekends. Normally, however, there is little or no overtime or weekend work.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

retirement plan	paid vacation
health plan	paid holidays
life insurance	sick leave

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

For further information write to:

University of Montana
Information Services
Main Hall 302
Missoula, MT 59801

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

American Speech and Hearing Association
9030 Old Georgetown Road
Washington, D.C. 20014

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.
Audiologist	076.101-010
Occupational Therapist	076.121-010
Physical Therapist	076.121-014
Music Therapist	076.127-014

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: SPORTING GOODS SALESPERSON

The SPORTING GOODS SALESPERSON sells a wide variety of leisure time equipment. They work with both across the counter customers and with large buyers of such equipment, such as school districts, recreation departments and corporations which have recreation programs.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Dependable	Verbal	Average health
Courteous	Clerical	
Neat Appearance		
Pleasant Manner		
Interest in Sports		

YOU SHOULD KNOW THAT

-While you need not be a star athlete, you should have an interest in sports and leisure time activities.

YOU MUST BE ABLE TO

-Learn about the wide variety of equipment and goods which are carried by your store;
-Demonstrate initiative and pay attention to details;
-Work with all kinds of people and maintain a pleasant attitude at all times.

DOT 277.357-058

PREPARATION AND TRAINING:

High school graduation is preferred for all permanent employees. Most sporting goods stores offer part-time jobs to high school and college students.

RECOMMENDED HIGH SCHOOL SUBJECTS:

High school subjects might include physical education--including football, baseball, track, golf, tennis, and archery; business courses--including elementary economics, basic math, speech, and reading.

COURSE OF STUDY AFTER HIGH SCHOOL:

Some colleges offer programs in recreation and business and a combination of these might be good:

- accounting or bookkeeping
- sales
- psychology
- business math
- merchandising
- fundamentals of recreation
- business machines
- display
- recreation courses which best meet your interests

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Jobs for the qualified salesperson are found in cities of all sizes and are available throughout the state.

ADVANCEMENT

The beginning salesperson will find that as his/her experience and ability increase, so will his/her paycheck.

MORE ABOUT THE JOB:

The sporting goods salesperson is a specialist in the sale and display of leisure time merchandise. He/she is employed by owners of sporting goods shops, or in sports departments of large department stores.

The salesperson must be able to demonstrate a wide variety of equipment to customers at all times maintaining a pleasant attitude.

Among all the things he/she should become familiar with are:

- football, baseball, and basketball equipment
- golf clubs
- tennis rackets
- archery equipment
- fishing equipment, both for inland or ocean fishing
- guns and other hunting equipment
- camping equipment, including tents, stoves, lanterns, cots, and backpacks
- boating equipment
- water skis
- outboard engines
- ski equipment, including poles, boots, sportswear
- you may also be involved with the sale of bicycles or trailbikes
- footwear involved in all sports also is a vital part of the sporting goods business.

JOB CLUSTER #11
"Marketing and Distribution"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$3.60-$8.35/hr	$6.00/hr	$3.60/hr

Salaries may vary throughout the state. Check a local source for salary information in your area.

HOURS OF WORK
Hours of work are normally forty per week. Because of weekend and night openings, the work schedule may vary somewhat, with an employee working Saturday or Sunday and having weekdays off.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

- paid vacation
- sick leave
- paid overtime
- health insurance
- employee discounts
- profit sharing

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

An employee of a local sporting goods store may be able to supply further information.

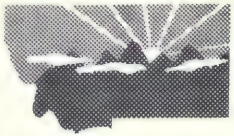
ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

The National Retail Merchants Association
100 W. 31st St.
New York, N.Y. 10001

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Sales Representative, Recreation & Sporting Goods	277.357-026
Toy Trains Salesperson	277.357-066
General Hardware Salesperson	279.357-050



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: STATIONARY ENGINEER

The STATIONARY ENGINEER operates and maintains equipment in industrial plants and other buildings that are essential to power generation, heating, ventilation, humidity control, and air conditioning. The primary responsibility is the safe and economical operation of this equipment.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Dependable	Mechanical	Good general health
Patient	Mathematical	Normal physical strength
Responsible	Finger dexterity	Normal use of hands and limbs
Good judgement		Good eyesight (normal and corrected)

YOU SHOULD KNOW THAT

-Engineers may have to spend time crawling inside boilers working in crouched positions;
-You would need to enjoy working around much heavy equipment which needs constant attention;
-You may be exposed to dust, dirt, grease, odors from oils, gas and smoke.

YOU MUST BE ABLE TO

-Tolerate the humming noise of machines and the heat from boilers;
-Work either with a small crew or work alone;
-Make decisions quickly on the spot;
-Spend time checking to prevent problems.

DOT 950.382-026

PREPARATION AND TRAINING:

The stationary engineer must have a high school education. Most stationary engineers begin through a formal apprenticeship program.

COURSE OF STUDY INCLUDES

- Practical Chemistry
- Elementary Physics
- Mechanical Drawing
- Blueprint Reading
- Ventilation and Heating
- Theory of Refrigeration
- Air Conditioning
- Machine Shop
- Applied Electricity

ADDITIONAL FACTS ABOUT TRAINING

New equipment being developed and installed in buildings requires more training and specialization than the old equipment; so present engineers also need retraining along with preparing additional workers for jobs.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

The increase of new buildings, hospitals, industrial firms, and hotels which now provide air conditioning and better facilities will require more stationary engineers.

Opportunities throughout Montana are limited.

ADVANCEMENT

Advancement would usually be to a larger plant with more equipment which might also involve supervision of several other stationary engineers and crew.

Most often, promotion requires the obtaining of a higher license.

MORE ABOUT THE JOB:

Stationary engineers operate and service the machinery which powers industry, lights cities, and controls the climate of large buildings. Their primary responsibility is the safe operation and maintenance of all kinds of steam boilers and such other equipment as heat exchangers, pumps, motors, turbines, generators, air compressors, air conditioning units, and refrigeration equipment. They may also be known as a watch engineer, a boiler operator, a plant engineer, operating engineer, general engineer, or power plant control operator.

Primary duties include being alert to faulty operation of equipment or its safety devices, and when required to make repairs. Routinely the pneumatic electric or electronic safety controls are tested to insure proper operation.

Duties will also vary according to where employed. Federal Government may require regular workers to do repair, while in private industry the day shift may do the repair work and the evening shift is limited to monitoring the equipment. In some businesses, stationary engineers may repair all kinds of equipment and may be a "jack of all trades."

JOB CLUSTER #9
"Manufacturing"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	Union scale ranges from $7.93 to $9.50 per hour.		

Salaries may vary throughout the state. Check your local union or employment service for information pertinent to your area.

HOURS OF WORK

The forty-hour workweek is normal. You may be required to work weekends and holidays.

FRINGE BENEFITS
Depending on length and place of employment, you may receive:

- paid vacation
- sick leave
- hospital insurance
- accident insurance
- retirement plan

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

International Union of Operating Engineers
1125 17th Street, N.W.
Washington, D.C. 20036

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Reefer Engineer (water trans.)	950.362-014
Compressor Engineer, Caisson (const.)	950.685-010
Boiler Operator	950.382-010

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: STENOGRAPHER

The STENOGRAPHER takes dictation of correspondence, reports, and other material, usually in shorthand. The STENOGRAPHER transcribes dictated materials into final form with the typewriter.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Dependable	Clerical	Good finger dexterity
Tactful and pleasant	Form perception	Good eye-hand coordination
Versatile		Normal vision and hearing (natural or corrected)
Even-tempered		Normal health
Attention to detail		
Able to work with people		

YOU SHOULD KNOW THAT

-Employers expect you to be neat and well groomed;
-You will usually have additional duties related to your employer's business;
-You may be required to use a variety of office equipment;
-You must be able to communicate clearly with others.

YOU MUST BE ABLE TO

-Take dictation at a sustained rate of at least 80 words per minute;
-Transcribe dictated material accurately;
-Type a minimum of 40 words per minute;
-Reconstruct poorly constructed sentences, punctuate correctly, spell accurately.

D O T 202.362-014

PREPARATION AND TRAINING:

High school graduation is almost always required. Additional training beyond high school is highly recommended and is required by some employers.

RECOMMENDED HIGH SCHOOL SUBJECTS

Typing	Filing	Sociology
Business Machines	Business Math	Psychology
Secretarial Practice	Bookkeeping	Speech
Shorthand	English	Office Practice

COURSE OF STUDY AFTER HIGH SCHOOL

College or university business education departments offer opportunity for training at all levels. Private business schools also can offer post high school training, as well as the area vocational technical centers.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Well-qualified stenographers have excellent opportunities. Employment opportunities are expected to increase. Most opportunities for employment are found in metropolitan areas.

ADVANCEMENT

Initially the stenographer performs routine tasks, but may advance in pay or to secretary.

MORE ABOUT THE JOB:

The ability to become a good stenographer demands a combination of:

-The ability to understand the meaning and relationships of words and sentences;
-Finger dexterity and eye-hand coordination for taking dictation or typing;
-Form perception to recognize shorthand symbols;
-Adaptability to routine repetitive and uninvolved tasks;
-Attention to detail in dictation or typed materials to avoid error;
-Willingness to work according to instructions;
-Ability to work with specialized terminology such as that in the medical, legal, or engineering fields.

The stenographer may also be asked to:

-Perform a variety of clerical duties;
-Transcribe material from sound recordings;
-Answer telephones;
-Greet clients;
-Operate various types of office equipment.

JOB CLUSTER #2
"Business and Office"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$769-$1343/mo	$900-$1000/mo	$769/mo

Because of varying rates of pay throughout Montana, specific information on salaries may be obtained at your nearby employment office.

HOURS OF WORK

The forty hour workweek is standard. Overtime is rare but you may be asked to work late or on a weekend if the workload is very heavy.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

pension plan	sick leave	health insurance
hospital insurance	paid vacation	life insurance

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs.
You may contact a youth representative at your local Employment Service Office

ADDITIONAL SOURCES OF INFORMATION:

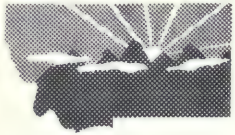
Your school counselor and librarian may also help you find additional information

National Association of Legal Secretaries
3005 E. Skelly Dr.
Tulsa, OK 74105

United Business Schools Association
1730 M Street N.W.
Washington, D.C. 20005

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Secretary	201.362-030
File Clerk	206.362-010
Clerk Typist	203.362-010
Receptionist	237.367-038



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: STOCK CLERK

A STOCK CLERK works in a storeroom or warehouse and is responsible for receiving and unpacking goods, checking accuracy of orders and storing and issuing supplies and equipment. Clerks keep a running inventory of items in storage and are responsible for keeping adequate supplies.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Dependable	Numerical	Good health
Systematic	Clerical	Full use of hands & feet
Precise		Freedom from back ailments
Neat work habits		Normal vision & hearing (natural or corrected)
Honest		

YOU SHOULD KNOW THAT

- -You won't qualify if you have a police record other than minor traffic violations;
- -Your appearance must be neat;
- -You may be required to drive a truck and use fork lifts or dollies in unloading and storing merchandise.

YOU MUST BE ABLE TO

- -Be systematic in receiving, unpacking, and inventorying merchandise;
- -Stand, walk, and lift much of the working day;
- -Perform the same duties day after day without letting up;
- -Use at least high school level math in record keeping;
- -Read invoices and keep a record of items received.

DOT 222.387-058

PREPARATION AND TRAINING:

High school graduation is generally required although some employers will hire without regard to education as long as the candidate can do the job. Without at least a high school diploma, chances for advancement to more skilled jobs are slim.

RECOMMENDED HIGH SCHOOL SUBJECTS

- English
- Business Math
- Office Practice
- Typing
- Public Speaking

ADDITIONAL FACTS ABOUT TRAINING

Most stock clerks get their training on the job. Employers expect them to be sharp enough to grasp the stockroom system in the particular firm and to record the basic inventory control information. Training may include an introduction to the firm's bookkeeping practices in use or any specialized equipment and machines. Training may vary from a few days to several months, depending on the type of industry.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Jobs may increase as business flourishes. At present there is high competition for job openings. Most job openings are found in urban areas.

ADVANCEMENT

With additional training a stock clerk may be promoted to manager, bookkeeper, storekeeper or purchaser.

MORE ABOUT THE JOB:

Stock clerks are employed in a variety of businesses, institutions and industries. In small establishments, stock clerks may perform all stock clerk duties. In large establishments employing many stock clerks, stock clerk jobs may have several classifications.

Depending on where employed, the stock clerk may:

- -Receive goods from freight carriers;
- -Check shipping bills;
- -Unpack merchandise, checking it against shipping invoices;
- -Inspect for damage;
- -List goods received on inventory sheets;
- -Hang or shelve materials received in correct bins;
- -Assist sales clerks in placing merchandise on display in the store;
- -Assist sales clerks in marking prices either with tags or stickers;
- -Transport goods received from freight terminals to stock rooms;
- -Inventory items against invoices;
- -Notify the head warehouseperson or storekeeper that ordered goods have arrived;
- -Prepare merchandise for rerouting to retail customers;
- -Unpack goods and deliver them to various assembly areas;
- -Use forklift to stack large quantities of items.

In some firms such as food, drug and tobacco suppliers, goods are kept in areas which must be clean, free from rodents and insects and at specified temperature or humidity level. The stock clerk usually has responsibility to keep tabs on such conditions and report any problems to his/her superiors immediately.

JOB CLUSTER #2
"Business and Office"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$3.30-$4.55/hr	$3.80-$4.20/hr	$3.30/hr

Salary ranges may vary widely depending on the type of job. Retail stock clerks whose jobs are usually relatively simple may never be able to advance to the top of the earnings range. Those whose jobs involve some quality control work may earn well above average.

Salaries may vary throughout the state. Check a local source in your area.

HOURS OF WORK

The standard workweek is forty hours, although some firms may require overtime work on weekends, particularly for inventory.

FRINGE BENEFITS

Depending on place and length of employment, you may receive the following:

paid vacation	health insurance	retirement program
employee discount	sick leave	paid holidays

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LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

National Retail Merchants Association
100 West 31st Street
New York, New York 10001

National Association of Wholesalers - Dist.
1725 K Street N.W.
Washington, D.C. 20006

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Parts Clerk	222.367-042
Prescription Clerk	222.367-050
Follow Up Clerk	221.367-018
Watch and Clock Repair Clerk	299.367-018
Film Librarian	222.367-026

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: STRUCTURAL STEEL WORKER

STRUCTURAL STEEL WORKERS erect, assemble, or install fabricated metal products for use in the construction of industrial, commercial, and large residential buildings. Also known as IRONWORKER.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Accurate	Mechanical	Above average physical strength and endurance
Precise	Numerical	Agile
Good judgement	Spatial	Good eyesight, without glasses is usually required
Attention to detail		Full use of legs, feet, arms, hands, and fingers

YOU SHOULD KNOW THAT

- -You usually will serve an apprenticeship to qualify as a structural or ornamental ironworker;
- -Hazards are serious: falls from heights, blows from structural parts, cuts, and others;
- -Those with fear of height should not consider structural steelworking as an occupation;
- -Work is seasonal, heaviest in the summer with some layoffs in the winter.

YOU MUST BE ABLE TO

- -Perform physically heavy work including lifting weights up to 100 pounds;
- -Travel at times to areas away from your hometown;
- -Work at heights well above the ground;
- -Exercise good judgement and assume responsibility for the quality of your work;
- -Work on your own from precise written instructions;
- -Visualize correctly the relationship of objects in space relative to each other.

DOT 801.361-014

PREPARATION AND TRAINING:

The structural steel worker usually serves a three-year apprenticeship in the steelworking trade. A high school diploma is required in most areas.

COURSE OF STUDY INCLUDES:

High School: Recommended are classes in English, arithmetic, mechanical drawing, blueprint reading, metal shop, forge shop, and welding.

Apprenticeship Training: Includes work in academic subjects plus regular on-the-job training from an experienced worker.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities are best when there is heavy construction activity.

Opportunities are best during the summer months.

ADVANCEMENT

Apprentices in structural steel working are first promoted to journeymen after successful completion of an apprenticeship program.

MORE ABOUT THE JOB:

Structural steel workers perform many of the same operations and work in the same type of setting, in fact, together on the same projects at times.

The work of the structural ironworker deals with the basic building process, while ornamental workers do more of what might be called finish work.

Structural ironworkers:

- -Erect steel framework on bridges, buildings, and other structures;
- -Install steel floor decking;
- -Install vault doors and their frames.

Ornamental ironworkers:

- -Install decorative ironwork on such things as balconies, lamp posts, gates, fences, and other conspicuous structures;
- -Install metal stairways, catwalks, iron ladders, and other such things.

All structural and ornamental ironworkers must be familiar with and be able to use the following tools:

- spud wrenches
- tapes
- hammers
- air guns
- other hand and power tools
- welding stingers
- boring and cutting torches
- wrenches
- pliers

JOB CLUSTER #4
"Construction"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	40	$12.00/hour		

Salaries may vary throughout the state. Check a local union or employment agency for accurate salary information for your area.

HOURS OF WORK

The normal workweek is forty hours, Monday through Friday. All work is performed during the daytime. Overtime is not frequent except when deadlines must be met.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

- health and welfare plan
- paid vacation
- pension plan
- unemployment insurance coverage

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office.

Employment Security Division
Box 1728
Helena, Montana 59601

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Associated General Contractors of America Incorporated
1957 E Street Northeast
Washington, D.C. 20006

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Boilermaker mechanic	805.381-010
Bench machinist	693.280-010
Lay-out maker	809.381-014
Frame repairer (motor and bicycles)	807.381-018
Welding, flame-cutting-machine operator	816.482-010

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MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: SURVEYOR HELPER

The SURVEYOR HELPER is a member of a survey crew. The crew's job is to measure horizontal distance between points, differences in elevation between points, line directions, and angles between lines.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Accurate	Numerical	Agile
Patient	Spatial	Average physical stamina
Alert		Eye-hand coordination
Dependable		Normal vision and hearing
Precise		Depth perception

YOU SHOULD KNOW THAT

- -You may be required to purchase safety equipment such as metal helmets;
- -Some jobs require constant moving about from job to job;
- -You may have to do inside work such as drafting during rainy weather;
- -Hazards of the job include snake bite, poison oak, rock slides, and traffic;
- -Most surveyor helpers work about ten months a year, depending on weather.

YOU MUST BE ABLE TO

- -Provide your own transportation in many cases;
- -At times, live at job sites away from city housing;
- -Tolerate all kinds of weather conditions;
- -Work in wilderness areas;
- -Carry loads up to fifty pounds.

D.O.T. 869.567-010

PREPARATION AND TRAINING:

High school graduation is generally required. Some college training will enable you to advance to better jobs more easily.

RECOMMENDED HIGH SCHOOL COURSES

Math	Blueprint Reading
Drafting	English
Mechanical Drawing	Geography

COURSE OF STUDY AFTER HIGH SCHOOL

Courses in engineering and surveying are recommended.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Only those with satisfactory mathematics backgrounds should consider becoming surveyor helpers.

The long term outlook for the well-qualified beginner is favorable.

Many surveyor helpers work for federal, state, and local government agencies.

There are a limited amount of jobs available throughout Montana.

ADVANCEMENT

Surveyor helpers with additional experience and training may be promoted to chief of the survey party or surveyor.

MORE ABOUT THE JOB:

Surveyor helpers are members of a survey crew. They measure horizontal distances between points, differences in elevation between points, line directions and angles between lines. These measurements fix boundary lines of the lots of a housing project, outline the route of new freeways, determine the proper placing of pipe in the expansion of a city sewage system, establish the correct placing of pillars for new bridges, or delineate any of a multitude of locations of objects usually related to construction work.

The surveyor helper:

- -Holds level and sight rods;
- -Sets and marks grade stakes, hubs, turning points, and benchmarks;
- -Takes measurements with tape or chain;
- -Carries instruments and stakes;
- -Cuts brush;
- -Makes computations and field notes;
- -Slides target disks on graduated rods;
- -Reads numerical measurements from graduated rod;
- -Makes tracings from blueprints;
- -Marks measuring points with marking crayon, paint sticks, scratches, tacks, or stakes;
- -Moves rod or target rod on command;
- -Follows verbal or hand signals of instrument person;
- -Calls out readings to note keeper or surveyor;
- -Does simple drafting.

JOB CLUSTER #4
"Construction"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	40	#3.40-$7.00/hr	$5.00-$6.00/hr	$3.50-$3.80/hr

While hourly wages are fairly high, it should be remembered that there are times of the year when surveyor helpers will not work because of the weather.

HOURS OF WORK

Generally surveyor helpers work a forty-hour week. This is day work rather than night. Because of weather holdups and other causes, there may be overtime.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

- overtime pay
- paid vacation
- retirement benefits
- life and health insurance
- paid holidays
- per diem allowance when working away from home

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LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

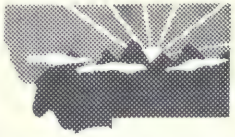
ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

American Congress on Surveying and Mapping
210 Little Falls St.
Falls Church, VA 22046

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Timing machine operator	715.685-034
Photochecker and assembler	976.687-014
Stonegrader (stonework)	670.384-010
Quality control tester	726.684-026



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: SWAMPER-LOADER (AERIAL APPLICATOR)

The SWAMPER-LOADER mixes fertilizers and pesticides according to prescribed formulas and loads seed, fertilizers, or pesticides into aerial applicator aircraft. Also may have the responsibility of washing and general cleaning of the aircraft, and keeping the loading area clean. May also have to locate flaggers on the field to be sprayed or fertilized.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Dependable	Numerical	Good physical health
Precise	Verbal	Stamina
Accurate	Some scientific	Strong back

YOU SHOULD KNOW THAT

- -Some of the chemicals used are so poisonous that a few drops on the skin can be fatal;
- -You will be expected to read well enough to understand chemical mixing instructions;
- -You should be able to read maps and charts so that you will be able to find airstrips and fields to be sprayed or dusted;
- -You may also expect to take orders on methods of operation and understand the need to obey those orders for safety sake.

YOU MUST BE ABLE TO

- -Learn to use a two-way radio;
- -Handle dangerous chemicals with caution;
- -Lift heavy loads;
- -Understand the limitation of each chemical, which is attached to each container.

DOT 409.667-010

PREPARATION AND TRAINING:

There is no minimum required for this job, but your chances of getting and holding the job will be better if you have graduated from high school.

RECOMMENDED HIGH SCHOOL SUBJECTS

Auto Shop	General Science	Chemistry
Metal Shop	Agriculture	Mathematics
Wood Shop	English	

COURSE OF STUDY AFTER HIGH SCHOOL

Most training comes on the job. If you hope to learn to fly a plane, however, you should take courses in aviation. Subjects pertaining to this may be obtained from most fixed base operators, along with study manual. Some subjects covered are Aerodynamics, Meteorology, Navigation (which in itself covers several subjects) and Federal Aviation Regulations.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Work of this type is seasonal.

A loader may keep busy year around by moving to various parts of the country where crops are being planted or harvested.

ADVANCEMENT

Opportunities for advancement are limited.

A loader who shows skill and is able to work with people may become head of a crew in a large operation.

If he/she likes mechanics' work, a loader can train to become an aircraft and engine mechanic.

Additional Note: A good loader, who may also have the ability to promote may work into a position of promoting in conjunction with the other duties. Therefore, you may be employed on a percentage basis, which can be very good income.

MORE ABOUT THE JOB:

Loaders, or swampers as they are often called, are the aerial applicator's ground crew.

They may:

-Load pickup trucks with chemicals and fuel and drive to rural landing strips;
-Mix and load chemicals in airplane hopper;
-Use a two-way radio to make sure flaggers are in position to signal the plane;
-Have the responsibility of washing and general cleaning of the aircraft;
-Have to keep the loading area clean;
-Have to locate flaggers on the field to be sprayed or fertilized.

JOB CLUSTER #1
"Agri-Business and Natural Resources"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
30-60	$3.75-$5.75/hr	$4.75-$5.00/hr	$3.75/hr

HOURS OF WORK

There is no standard workweek. Hours are usually in the early morning and late afternoon.
Work may start at 4 a.m. and run as late as 9 p.m. During peak seasons, 60 to 70 hour workweeks are common. Night flights are common in some areas.

FRINGE BENEFITS

Depending on the place and length of employment, you may receive the following:

overtime pay
medical insurance
Industrial Accident Insurance

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LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Check the yellow pages for a crop dusting firm and contact them for further information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Soil Conservation Service
Mitchell Building
Helena, Montana 59601

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Field Hauler (agric.)	409.683-014
Farm Machine Operator	409.683-010
Farmworker, Machine	409.686-010

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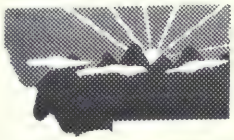


MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: TABULATING MACHINE OPERATOR

The TABULATING MACHINE OPERATOR runs machines designed to sort and count large quantities of accounting and statistical information that has first been transferred onto cards by key-punch operators.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Patient	Numerical	Good eye-hand coordination
Cooperative	Clerical	Good vision
Concentration	Finger dexterity	Full use of arms and hands
Interest in small detail		Above average physical stamina
Able to work alone		Full use of legs and feet

YOU SHOULD KNOW THAT

- -Some tabulating machine operators' jobs are being eliminated by the introduction of new electronic equipment which is replacing the need for some manually operated machines;
- -You may be required to perform other routine clerical duties in addition to operating the tabulating machine.

YOU MUST BE ABLE TO

- -Work for long periods of time on your feet;
- -Work while walking about, bending and turning;
- -Lift and carry trays of cards weighing from 20 to 60 pounds;
- -Follow oral and written instructions closely and accurately;
- -Tolerate constant noise caused by the operation of the machines.

D.O.T. 213.682-010

PREPARATION AND TRAINING:

The tabulating machine operator must have a high school education or its equivalent. He or she should have previous experience with office machines and/or specialized training at the college level.

COURSE OF STUDY:

Business English	Typing	Data Processing
Mathematics	Basic Office Machine Operation	Business Data Processing
Bookkeeping		Punch Card Accounting
Computer Technology		

ADDITIONAL FACTS ABOUT TRAINING:

Those who wish to find work as operators are forced to achieve higher levels of training. In a rapidly changing field as is this, formal training is the best possible method of obtaining your first job and insuring continued employment.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities may be found in the larger metropolitan areas.

Throughout the State of Montana, however, opportunities are limited.

ADVANCEMENT

For operators with superior aptitudes who continue their training, the more difficult but better paying jobs of computer programmer and systems analyst are possibilities.

After gaining experience on simple machines, many operators advance to more complex equipment.

MORE ABOUT THE JOB:

The tabulating machine operator operates a machine most often known by its trade name, Tabulating Machine (IBM) or Tabulating Machine (Remington-Rand), which is designed to sort and count large quantities of accounting and statistical information. The machine is able to analyze, classify, tabulate, and translate this data at relatively high speed for accounting procedures, government reports, and myriads of other details.

The operator may perform any combination of operational tasks on any or all of the series of machines in the system such as sorter, collators, reproducers, multipliers, interpreters, and tabulators. Each machine is operated independently by feeding punch cards into the machine in an established sequence to obtain the desired data output.

A starting trainee may learn the simpler operations and at the same time become familiar with the office procedures and the daily, weekly, monthly, and special records and reports processed by the organization's machine records department. He/she may also be expected to perform related clerical work in connection with the operation.

JOB CLUSTER #2
"Business and Office"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
37½-40	$167-$195/wk	$189/wk	$167/wk

Salaries may vary throughout the state. You may wish to check a local source for salary information for your area.

HOURS OF WORK
The operators normally work a thirty-five- to forty-hour week. Night shift work is abnormal. During peak periods, operators may work on weekends.

FRINGE BENEFITS
Depending on length and place of employment, you may receive:

paid vacation
paid sick leave
health and life insurance

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Employment Security Division
Box 1728
Helena, Montana 59601

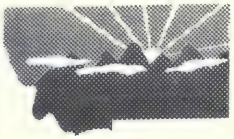
ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Data Processing Management Association
505 Busse Highway
Park Ridge, Illinois 60068

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Duplicating Machine Operator	207.682-010
Offset Duplicating Machine Operator	651.682-014
Recording Engineer	194.362-010



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB:

TAILOR

TAILORS are craft workers who can do all hand and machine operations needed to make a garment. Some tailors are employed in plants making men's, women's and children's garments. Other tailors are employed in custom shops or retail clothing stores.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Neat	Numerical	General good health
Creative	Finger dexterity	Good eyesight
Reliable		Good eye-hand coordination
Patient		
Persistent		

YOU SHOULD KNOW THAT

- tailors lose little time working due to layoffs and strikes
- most tailors work on an hourly basis unless they own their own business
- eyestrain and nervous tension are hazards of tailoring.

YOU MUST BE ABLE TO

- follow written and oral instructions closely and correctly
- do detailed hand work and do it accurately for long periods of time
- use tact and diplomacy with customers
- spend several years learning the tailor's trade.

D.O.T. 785.261-014

PREPARATION AND TRAINING:

High school graduation or its equivalent is required of the tailor. Most employers will hire qualified apprenticeship trainees. However, most prefer to hire experienced help.

COURSE OF STUDY INCLUDES

High School

History	Sewing	Design
Business Courses	Art	English

College or Trade School

Tailoring	Cutting	Other related courses depending on specific individual goals
Dressmaking	Alterations	

ADDITIONAL FACTS ABOUT TRAINING

Tailors learn their trade in one of two ways--starting directly to work under an experienced tailor, or first attending a trade school then going to work as an apprentice.

Creativity is very important in this field.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities exist in tailoring shops, drycleaning establishments and manufacturing plants.
Jobs are available throughout Montana.

ADVANCEMENT

In the garment industry, a tailor may advance to head tailor or production quality manager. In the retail trades, the advancement will be from lesser to more difficult tasks.

MORE ABOUT THE JOB:

There are several kinds of tailors. They may be called bushelers or alteration tailors, skilled or custom tailors and shop tailors.

Bushelers, or alteration tailors, repair imperfections in completed garments. They trim inaccurately sewn parts and do corrective sewing. Although bushelers are usually less adept than skilled tailors, they specialize in construction of garments they work on and, in addition, know how to operate several different kinds of sewing machines. When working in retail stores, bushelers or alteration tailors alter factory-made garments to fit individual customers.

Skilled tailors, sometimes called all-round tailors, custom tailors or made-to-measure tailors, usually work in custom tailoring shops. They may be self-employed or may work in small, tailor-to-trade establishments, or they may supervise semiskilled factory workers. Skilled tailors may also do difficult hand and sewing machine tasks in a factory. They may design clothes, make patterns, cut out garment parts, baste materials together and sew garments by hand or machine. Skilled tailors often make sample garments for designers. This job requires a detailed knowledge of all garment-making processes.

Shop tailors specialize in hand or machine sewing. They perform different tasks, such as basting collars to coats, attaching shoulder padding, or attaching canvas to coat or jacket fronts. Shop tailors' duties in production plants vary with the size and kind of production system used. Occupational titles generally describe the work shop tailors do. For example, they may be called sewing machine operators, shapers, basters, finishers or quality control persons. The job requires detailed, practical knowledge of special tailoring tasks and ability to use many different kinds of sewing machines. Although some shop tailors may do all-round tailoring, most generally do one or two specific sewing operations.

JOB CLUSTER # 13 "Personal Services"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
35-40	$3.94-$5.69/hr	$4.79/hr	$3.94/hr

Salaries may vary with union or non-union shops. You may wish to check a local source for accurate salary information for your area.

HOURS OF WORK

Thirty-five to forty hours a week is common depending on the employer and union contract. Overtime is more frequent in production shops than in retail stores.

FRINGE BENEFITS

Depending on place and length of employment, you may receive the following:

- group insurance plan
- paid vacation
- life insurance
- retirement plan

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

ADDITIONAL SOURCES OF INFORMATION:

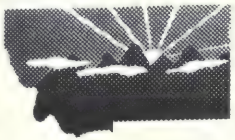
Your school counselor and librarian may also help you find additional information

United Garment Workers of America
Room 1614
200 Park Avenue South
New York, N.Y. 10003

Apparel Manufacturers' Association
1440 Broadway
New York, N.Y. 10018

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.
Dressmaker	785.361-010
Garment Fitter	785.361-014
Sample Stitcher	785.361-018



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: TAPE PERFORATOR

TAPE PERFORATORS are newspaper employees who transcribe typed newscopy onto perforated tapes which are then fed into machines which cast metal type for use in printing.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Dependable	Clerical	Good eye-hand coordination
Accurate	Numerical	Full use of both hands
Precise		
Attention to detail		

YOU SHOULD KNOW THAT

- -Working conditions are generally good, although if the noise of machinery bothers you, a newspaper plant is not the place you will want to be;
- -In some newspapers, apprenticeship trainihg includes not only operation of tape punchers but the learning of all backshop processes;
- -Other papers, however, train tape punchers for only one job.

YOU MUST BE ABLE TO

- -Type swiftly and accurately;
- -Sit in one place for long periods of time;
- -Spell well and recognize grammatical errors;
- -Work under pressure of deadlines.

D.O.T. 203.582-062

PREPARATION AND TRAINING:

High school graduation is the minimum training required for the tape perforator. College study is not required but in some cases apprenticeship program credit is given for any courses taken.

RECOMMENDED HIGH SCHOOL SUBJECTS

Typing is a must since the perforating machine keyboard is essentially the same as a typewriter. English and spelling should also be emphasized.

COURSE OF STUDY AFTER HIGH SCHOOL

College courses in graphic arts will be helpful to anyone who wants to move from type perforator to other types of composing room jobs.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Many newspapers have frequent openings for tape perforators.

There is more use of the semi-automatic teletype-setting machines which has the effect of increasing production and cutting down on the job of tape perforator.

ADVANCEMENT

The tape perforator who learns other phases of a backshop operation may advance to such jobs as assistant supervisor, supervisor, or production assistant.

This job will become less desirable with the shift to new processes. The long range outlook is on the much smaller newspapers or in job shops which convert to some automatic equipment but cannot afford the more sophisticated video terminals, etc.

MORE ABOUT THE JOB:

Tape punchers are machine operators who make a reporter's copy and put it on the first step toward being published in the newspaper.

The tape puncher transcribes the typed copy onto perforated tape. A machine with keyboard very similar to typewriters except for ten additional keys for various newspaper symbols is used.

Tapes are then fed into linotype machines equipped with teletype setters, electronic components which automatically operate the linotype. Each punch symbol activates a different key on the linotype machine, causing it to cast lines of type.

When a story is completed, the metal type from the linotype machine is then placed in a tray or gallery and a proof is pulled. Proofs are then checked for spelling or typographical errors, corrected and then sent to the composing tables where the metal type is placed in cases which are the beginnings of a newspaper page.

It is easy to see why accuracy is required of the tape puncher. If original mistakes slip through, it may mean stopping a press and setting correction lines, inserting them in the case, making new mats and plates, then mounting the plates on the press and restarting it.

On the larger papers this job may cease to exist except for a very few personnel. The shift will be to the reporter and editor actually preparing the final step before it goes into the machines which turn out the printed galleys.

JOB CLUSTER #3
"Communications and Media"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	40	$9.00 per hour or more for journeymen		

Salaries for tape punchers vary widely. Check local sources for specific salary information.

HOURS OF WORK
In general, the forty-hour workweek is standard. Most of the workers on afternoon papers are on a 7:30-3:30 or 4:00 p.m. shift with crews sometimes working on swing or graveyard shifts. Since most newspapers publish six days a week, and many publish seven, few workers get weekends off.

FRINGE BENEFITS
Depending on length and place of employment, you may receive:

paid overtime	paid vacation	health insurance
pension plan	life insurance	sick leave

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LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

The personnel department of a local newspaper can provide further information.

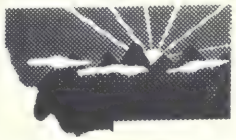
ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

International Typographical Union
P.O. Box 157
Colorado Springs, Colorado 80901

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Braille operator (print. & pub.)	203.582-010
Photocomposing-machine perforator operator (print. & pub.)	203.582-042
Transcribing-machine operator (clerical)	203.482-058



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: TAXI DRIVERS

TAXI DRIVERS opperate local, commercially licensed automobiles for passengers from one place to another for a specified amount of money. The charges usually are controlled by community ordinance and are based upon the distances they drive the passengers plus the time involved.

TAXI DRIVERS obtain passengers by waiting at entrances of hotels, theaters, airports, etc.; by cruising on the streets; and through radio dispatch messages transmitted from company offices. These drivers must be familiar with streets in their areas, as well as the locations of hotels, office buildings, sports arenas, theaters, etc.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Courteous	Some verbal	Stamina
Tactful	Numerical	Normal physical strength
Tolerant		Good vision and hearing (natural or corrected)
Like working with the public		Normal eye-hand co-ordination
		Full use of hands and legs

YOU SHOULD KNOW THAT

- -You may drive a taxicab days or nights;
- -You must have a good driving record to qualify as a taxicab driver;
- -Your success and income as a taxicab driver will depend in large part on your initiative and the amount of courtesty and helpfulness that you display towards your riders;
- -Hazards include nervous tension from driving regularly in heavy traffic.

YOU MUST BE ABLE TO

- -Get along reasonably well with all kinds of passengers, many of whom will be in a hurry;
- -Follow a set routine in dealing with customers;
- -Do basic arithmetic calculations accurately;
- -Drive an automobile in all kinds of traffic conditions.

D.O.T. 913.463-018

PREPARATION AND TRAINING:

For the taxicab driver, there are no specific educational requirements. However, a high school diploma is recommended. There will be brief on-the-job training.

COURSE OF STUDY:

High School: Driver Training and Education, English, Business Arithmetic, Speech, and Shop Courses are recommended.

On-the-job Training: Includes use of radios and of taxi driving procedures.

ADDITIONAL FACTS ABOUT TRAINING

Completion of your high school education usually will enable you to pass whatever tests are necessary for employment as a taxicab driver. Good knowledge of local geography and streets is helpful preparation for employment.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities for beginning taxicab drivers are good because of high turnover rate.

Taxicab drivers are employed in cities and towns of all sizes.

ADVANCEMENT

Advancement opportunities for taxicab drivers are few.

Occasionally the driver may advance to the job of dispatcher.

In some cities, drivers may purchase their own cabs.

MORE ABOUT THE JOB:

Taxicabs are part of the transportation system of cities and towns of all sizes. They augment the use of cars, buses, trains and other means of getting from place to place. Taxicab drivers are the workers who operate this part of the system.

All drivers must be at least normally good drivers and work a great deal of their time in conditions which test and improve their skills behind the wheel. In addition to their basic task of transporting people from one place to another, drivers have other duties such as:

- -Assist people in and out of cars, particularly older riders;
- -Help customers with bags and baggage;
- -Answer all kinds of questions regarding their community, the facility for entertainment and other attractions;
- -Giving directions;
- -Making change.

In addition to the tasks the taxicab driver performs which directly involve passengers, they usually must do the following:

- -Keep clerical records of all fares including where the person was picked up as well as where left off;
- -Keep on the alert for calls over the two-way radio for needed service;
- -Keep informed about what is going on in town that will draw crowds of people;
- -May have to clean cab periodically, particularly drivers with small companies.

JOB CLUSTER #15
"Transportation"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40-60			

Most taxi drivers are paid a percentage--usually between 40 and 50 percent--of the total fare. Drivers usually receive tips, ranging from 10 to 20 percent of the fare. In 1978, a private survey reported that taxi drivers averaged $3.90 an hour, plus tips.

HOURS OF WORK

Drivers work from 40 to 60 hours, depending on the initiative of each individual driver. Drivers usually choose whether they wish to work days or nights. Weekend work is normal.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

- paid vacations
- group insurance
- paid uniforms
- hospitalization plans
- severance pay

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

A driver with a local taxi company could provide you with further information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

National Association of Taxicab Owners
803 Leader Building
Cleveland, Ohio 44114

American Taxicab Association
4415 North California Avenue
Chicago, Illinois 60625

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Commercial Bus Driver	913.463-010
Truck Driver	906.683-022
Ambulance Driver	913.683-010
Parking Lot Attendant	915.473-010

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: TEACHER (ELEMENTARY)

ELEMENTARY TEACHERS are facilitators for learning. They prepare and give lessons to children, give tests, assign grades and perform related duties in grades kindergarten through sixth. In Montana the term "elementary" may also include seventh and eighth grades.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Patient	Verbal	Good vision (natural or corrected)
Tactful	Numerical	General good health
Enthusiastic	Clerical	
Preference for working with others	Intelligent	
Attention to detail		
Love for children		

YOU SHOULD KNOW THAT

- -A certificate issued by the State of Montana is required to qualify for elementary teaching;
- -Occasional evening and weekend work is normal for elementary teachers;
- -Teachers are employed nine or ten months a year allowing more than the usual time for outside activities;
- -Evidence of good character is an essential qualification.

YOU MUST BE ABLE TO

- -Read and write the English language understandably;
- -Communicate with small children on a level which they can understand;
- -Organize and present facts and concepts in orderly fashion;
- -Use principles of education and child psychology effectively in order to further learning and social development in children.

D.O.T. 092.227-010

PREPARATION AND TRAINING:

The elementary school teacher must obtain an elementary teaching certificate requiring the completion of a B.A. or B.S. degree.

COURSE OF STUDY INCLUDES

High School: A college preparatory major including mathematics and sciences is recommended.

College: General information on the requirements of colleges for entrance into teacher training programs is discussed below under "Additional Facts About Training".

ADDITIONAL FACTS ABOUT TRAINING

Admission to a college as a freshman does not constitute admission to a teacher training program. Usually the student must:

(a) complete at least one year at the college with a specified grade point average, usually from a 2.2 to a 2.5, depending on the college.

(b) apply for admission to the teacher training program at your college.

(c) pass certain qualifying examinations and interviews.

The requirements listed above vary from school to school. See your counselor and catalogs for colleges in which you are interested.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

The projected opportunities in Montana indicate for the years 1980-90 expansion will be 120, replacement needs 410 and average annual openings 530.

Because of the teacher surplus nationwide, competition for jobs is keen.

ADVANCEMENT

With additional training, teachers may advance to vice-principals and principals in the school setting.

Many opportunities require advanced study beyond the requirements for the teaching job itself.

After three years, teachers may acquire tenure.

MORE ABOUT THE JOB:

Elementary school teachers instruct students in various subjects in kindergarten and grades one through eight, though most teach at grade six or lower. The teacher may instruct in all ages regularly taught in the elementary school. The teacher provides instruction in some or all of the following subjects, depending on the grade taught:

reading	social studies	foreign language
physical education	writing	crafts
arithmetic	art	music
general science		

Teachers perform the following classroom and directly related tasks:

- -Teach lessons using lectures, demonstrations, audio-visual aides, question and answer and discussion techniques;
- -Prepare lesson plans, exercises, tests and other learning activities;
- -Administer, correct and assign grades to tests and exercises;
- -Periodically evaluate students in terms of conduct, achievement and social development and assign grades accordingly on student report cards;
- -Keep attendance records and maintain order in the classroom and on the school grounds.

Additionally, elementary school teachers:

- -Attend professional faculty and other meetings;
- -Assist and advise students regarding non-classroom extra-curricular activities;
- -Counsel parents about the development of their children.

JOB CLUSTER #13
"Public Services"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	40			

According to the National Education Association, public elementary school teachers averaged $14,669 a year in 1978-79. Collective bargaining agreements cover an increasingly large number of teachers.

Salaries will vary throughout the state.

HOURS OF WORK

Elementary teachers work at school about seven hours daily Monday through Friday. Additional hours at school are required from time to time in the supervision of evening functions and at meetings and open hours. Some work at home is normal (grading papers or report cards).

FRINGE BENEFITS

In addition to two months in the summer, teachers receive vacation time at Christmas and Easter and other holidays. They may also receive:

paid sick leave	group life insurance	retirement plan
group health insurance	emergency leave	sabbatical leave

VV10579

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Placement service at colleges and universities.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information.

National Commission on Teachers Education and Professional Standards
National Education Association
1201 16th Street, N.W.
Washington, D.C. 20036

Montana Education Association
1232 East 6th Avenue
Helena, Montana 59601

U.S. Department of Health, Education and Welfare
Office of Education
Washington, D.C. 20202

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Teacher, kindergarten	092.227-014
Teacher, handicapped children	094.227-018
Teacher, secondary	091.227-010
Teacher, college or university	090.227-010
Tutor	099.227-034

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MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: TEACHER (SECONDARY SCHOOL)

SECONDARY SCHOOL TEACHERS prepare and give instructions in one or more subjects to students in grades seven through twelve. Related duties include administering tests, assigning grades, attending meetings, maintaining discipline and others.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Patient	Verbal	General good health
Tactful	Clerical	Good vision and hearing (natural or corrected)
Orderly habits	Numerical	Normal use of arms, hands, legs and feet
Neat appearance		
Able to relate to others		
Genuinely interested in young people		

YOU SHOULD KNOW THAT

-A credential issued by the State of Montana is required to qualify for secondary teaching;
-Additional schooling is required for re-certification every five years;
-More than one area of preparation is essential;
-Evidence of good character is an essential qualification.

YOU MUST BE ABLE TO

-Express yourself clearly in written and spoken English;
-Organize and present facts and concepts in an understandable orderly manner;
-Communicate successfully with the young people and their parents regarding their children;
-Move about normally and carry lightweight loads.

D.O.T. 091.227-010

PREPARATION AND TRAINING:

The secondary school teacher must obtain a secondary teaching credential requiring the completion of a bachelor's degree.

THE COURSE OF STUDY

High School: A college preparatory curriculum is recommended. Involvement in extra-curricular activities is strongly recommended.

College: For general information on the requirements of colleges for entrance into teachers training programs, check with your counselor and the catalogs of various schools.

ADDITIONAL FACTS ABOUT TRAINING

Admission to a college as a freshman does not mean that a student is admitted to the teacher training program. Usually the student must:

-Complete at least one year in college with a grade point average of at least 2.0 (C);
-Apply for admission to the teacher training program at your college;
-Pass certain qualifying exams and interviews.

The above cadet teaching experience must be completed prior to teaching certification.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

The projected opportunities in Montana indicate for 1980-1985 that approximately 100 jobs are available each year.

Because of the surplus of teachers, competition for these jobs is keen.

ADVANCEMENT

Many opportunities require advanced studies beyond the requirements for the teaching job itself.

MORE ABOUT THE JOB:

The secondary school teacher instructs in a field of study in which he/she is qualified and often in an additional study area in which the teacher is prepared.

Subjects taught may be academic or non-academic. Some are:

English	Vocational Subjects:	Drafting
Social Studies	Electronics	Art
Mathematics	Building Trades	Agriculture
Civics and Government	Metal & Machines	Health
History	Distributive Educ.	Industrial Arts
Physical Education	Home Economics	Health Careers
Biology	Business Educ.	Chemistry
Physics	Automotive	Foreign Languages
Music		

Teachers perform the following classroom and directly related tasks:

- -Teach lessons using lectures, demonstrations, audio-visual aids, question and answer and discussion techniques;
- -Prepare lesson plans, exercises, tests and other learning activities;
- -Administer, correct and assign grades to tests and exercises;
- -Keep attendance records and maintain order in the classroom and on the school grounds;
- -Attend professional faculty and other meetings;
- -Advise students regarding course and program selection and other student concerns;
- -Counsel with parents and others regarding students.

JOB CLUSTER #13
"Public Services"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	40			

According to the National Education Association, public secondary school teachers averaged $15,474 per year in 1979. Salaries will vary.

HOURS OF WORK

Secondary teachers work at school about eight hours daily Monday through Friday. Additional hours at school are required from time to time in the supervision of evening functions such as clubs, dances and athletic events. Preparation work is frequently required outside of school time.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

paid sick leave	group health and dental insurance
group life insurance	vacation at Christmas and Easter
retirement plans	two months in the summer
maternity and educational leaves	

VV10579

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

A counselor, school administrator or other teacher could provide local information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

National Commission on Teacher Education and Professional Standards
National Education Association
1201 16th Street N.W.
Washington, D.C. 20036

All Montana 4-year colleges and universities have teacher education programs. Write to the Director of Admissions or the Dean of Education at the college of your choice for more information.

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Educational therapist	094.227-010
Counselors	045.107-010
Elementary Teacher	092.227-010

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: TECHNICAL ILLUSTRATOR

The TECHNICAL ILLUSTRATOR makes three-dimensional drawings of electrical, mechanical, and structural parts and assemblies. Occasionally, he/she might be required to construct models of mock-ups out of paper or a solid material.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Creative	Artistic	Eye-hand coordination
Patient	Finger dexterity	Good eyesight
Meticulous	Some mechanical	Good color acuity
Cooperative		Full use of arms and hands

YOU SHOULD KNOW THAT

-You must be a good craft worker, versatile, rapid, and accurate;
-Much work is done for the federal government or those working under contracts from the federal government, which may require a security clearance check;
-The field is not yet overcrowded, but since much government contract work is done, sudden cutbacks could mean layoffs for illustrators.

YOU MUST BE ABLE TO

-Work alone from both oral and written instructions;
-Visualize an object to be portrayed into three-dimensional drawing from a two-dimensional print or oral description;
-Sit and concentrate on fine details for long periods of time.

DOT 017.281-034

PREPARATION AND TRAINING:

The technical illustrator must have at least a high school education.

RECOMMENDED HIGH SCHOOL COURSES:

Mechanical Drawing	Printing
Art	Science
Photography	Math

COURSE OF STUDY AFTER HIGH SCHOOL:

Art and Composition	Photography	Techniques of Shades and Shadows
Advertising Design	Applied Physics	Study of Mock-ups and Paste-ups
Engineering Drafting	Technical Illustration	
Technical Math	Graphics and Printing	

ADDITIONAL FACTS ABOUT TRAINING

Considerable talent is necessary in addition to the preparation for a student to find placement on a job.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

The demand is good for the talented technical illustrator.

Opportunities, however, are limited throughout the State of Montana.

ADVANCEMENT

Illustrators usually start as inkers, letterers, and paste-up workers.

Qualified persons then progress to: illustrators, visualizers, lead persons, supervisors, department managers.

MORE ABOUT THE JOB:

The technical illustrator is both a craft worker and an artist, seeking to portray the three-dimensional drawings, parts and assemblies for manufacturing and development companies. He/she may also do illustrations for handbooks to guide operational and maintenance workers in their tasks, for catalogs, parts lists and other printed matter. He/she may also make a model or mock-up out of paper or solid material.

Technical illustration embodies many techniques of drafting and commercial art requiring mechanical knowledge, artistic ability and a strong sense of structure and detail. The job involves making plans for the layout by study of blueprints, photographs, models and actual parts, consulting with engineers and others. The work may include charts, schematic diagrams and orthographic projections in addition to the customary three-dimensional isometric or perspective views.

The technician may draw cutaways to show internal detail, exploded views to illustrate individual parts in relation to each other, may shade, color or opaque parts of a drawing to give emphasis to certain details and to present various materials that constitute the object.

The technician works with pencil, ink, oils, water colors, air brush, overlays and photographic eradicators. They may draw cartoons, letter titles and draw textural material directly on the illustration or make them separately and paste them in place.

JOB CLUSTER #10
"Manufacturing"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$6.07-$7.40/hr	$6.75-$7.00/hr	$6.07/hr

The ranges in various jobs are wide, partly because wages within an occupation vary according to workers' skills and experience, and partly because wages differ from plant to plant, depending upon type of plant, locality and other factors. A local source should be checked for accurate salary information in your area.

HOURS OF WORK

The forty-hour workweek is normal.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

sick leave	paid vacations and holidays
health and accident benefits	life insurance

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Contact the public relations department of an electronic company in your area and ask about the technical illustrator.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

For specific information about an occupation contact:

International Union of Electrical Radio and Machine Workers, AFL-CIO, CLC
1126 16th Street NW
Washington, D.C. 20036

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Drafter	017.261-026
Detailer (profess. & kin.)	017.261-018
Automotive Design Drafter	017.281-022

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: TECHNICAL WRITER

The TECHNICAL WRITER interprets scientific and engineering developments by assembling, analyzing, and recording information in forms that suit the specific needs of the readers whether policy makers, administrators, technicians, craft workers, or the general public.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Tactful	Verbal	Normal or corrected vision
Accurate	Able to grasp technical subject matter and terminology	
Precise		
Think logically		
Adapt to change		

YOU SHOULD KNOW THAT

-Workloads are described in terms of feast or famine;
-Some employers shift their writers and editors to administrative tasks to maintain year-round employment for them.

YOU MUST BE ABLE TO

-Visualize forms and objects in two or three dimensions;
-Describe in words what you see;
-Read blueprints and technical descriptions;
-Do library research.

D.O.T. 131.267-026

PREPARATION AND TRAINING:

Technical writers are expected to be high school graduates. They are expected to have had courses in English grammar, composition, science, and math.

COURSE OF STUDY:

Technical Drawing	Typing	Editing Publications
Technical Math	Technical Writing	Advanced Composition
Technical Physical Science	Journalism	Vocabulary Building

ADDITIONAL FACTS ABOUT TRAINING

Almost no formal on-the-job training programs exist in this field. Continuing scientific progress requires that the technical writer keep abreast of developing trends and techniques.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities for technical writers are somewhat limited in this state.

The greatest demand for technical writers is in geographical areas with aerospace and related industries.

ADVANCEMENT

The technical writer with experience and additional training will find many avenues of promotion exist in this occupation:

-The technical writer will be able to move from simpler to more complex projects;
-The technical writer's job provides an overall view of company operation so that a suitably qualified writer may find opportunities in company management positions.

MORE ABOUT THE JOB:

The technical writer's function is to present scientific and technical information in a simple, clear, and factual manner so that it can be readily understood by readers who are not scientists. Since many scientists, engineers, and other specialists find it difficult and time consuming to write in non-technical language, the technical writer establishes easy communication between these workers and the users of their information.

The technical writer:

- -Researches the subject;
- -Acquires or verifies technical knowledge of subject by interviewing workers engaged in developing new equipment or in making improvements;
- -Observes performance of experiments and methods of production;
- -Reads blueprints, sketches, engineering drawings, and notes;
- -Oversees publication of illustrative material;
- -Makes rough sketches to aid artists in making final drawings;
- -Selects photographs, drawings, and sketches;
- -May assist in preparation and layout of work for publication;
- -Is also known as handbook writer, service publication writer, technical editor;
- -Sometimes prepares sales literature, drafts of contract proposals, and publicity releases on scientific and technical developments.

JOB CLUSTER #3
"Communications and Media"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$670-$1550/mo	$975-$1300/mo	$670/mo

The salary depends on training and experience. Individual ability also determines how high salary may go. Those with some administrative duties may earn more.

HOURS OF WORK

The forty-hour workweek is standard. Overtime and weekend work is often necessary.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

- paid vacation
- retirement plan
- medical insurance
- life insurance

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Society of Technical Writers and Publishers Incorporated
1010 Vermont Avenue, N.W.
Washington, D.C. 20005

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Columnist	131.067-010
Copy Writer	131.067-014
Newscaster	131.267-010

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: TELEPHONE OPERATOR

A TELEPHONE OPERATOR is employed by a telephone company or other business to assist people in making telephone calls. Telephone operators are of two types--the central office operator for a telephone company who handles calls of all kinds that cannot be completed by the automated process, and the PBX operator who operates switchboards in business and other establishments.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Initiative	Verbal	Normal hearing and vision
Tactful	Clerical	Full use of hands
Courteous		Pleasant speaking voice
Dependable		Normal color vision
Cooperative		
Good memory		

YOU SHOULD KNOW THAT

-the work is repetitive and you must be able to do the same thing day after day without becoming bored
-you will sit at one station for long periods of time and this can be uncomfortable
-you may be required to work swing or graveyard shifts and some holidays and weekends
-you may not qualify if you do not have a good high school attendance record

YOU MUST BE ABLE TO

-speak clearly and with a pleasant voice
-work rapidly and accurately while under pressure
-work under conditions in which you face interruptions
-use good judgement, especially in emergency situations
-control voice, not showing irritation or displeasure

D.O.T 235.462-010

PREPARATION AND TRAINING:

High school graduation is required. Some college training is helpful if you want to advance into better jobs.

RECOMMENDED HIGH SCHOOL COURSES: Speech, Office Practice, English, Typing, Business Math

COURSE OF STUDY AFTER HIGH SCHOOL

Training should be in the business/clerical area. Speech is highly recommended because you will be talking with people. A well-modulated voice is a great asset if not a requisite.

ADDITIONAL FACTS ABOUT TRAINING

Most telephone companies have on-the-job training programs for their new employees.

PROSPECTS AND OPPORTUNITIES:

JOB AVAILABILITY TRENDS

The employment outlook for telephone operators shows no significant increase through the mid-1980's. New workers will be hired each year to replace experienced operators who transfer to other occupations, retire, or stop working for other reasons.

ADVANCEMENT

Advancement opportunities are fair. Advanced positions are service representative, supervisor, instructor, office clerk and chief operator.

MORE ABOUT THE JOB:

The telephone operator may place calls for persons unable to dial for themselves, may place calls to police or fire departments in emergencies, or may place long-distance calls that cannot be dialed directly and record charges. Some operators give directory assistance. Some business offices have telephone switchboards and employ people called PBX operators to place and receive interoffice and outside calls.

Some job responsibilities are:

-assisting callers during emergencies, such as fires
-assisting callers in person-to-person calls
-giving directory assistance
-assisting handicapped callers
-routing calls
-recording time and long-distance charges

Telephone companies offer a number of different operator jobs. The largest group of operators are those who handle long-distance calls. The next largest group consists of directory assistance operators who furnish telephone number information. Others handle rate and route, intercept, mobile, overseas, marine, conference calls and local assistance. Operators generally handle more than one kind of call.

JOB CLUSTER # 13

"Communication and Media"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$152-$261/wk	$200/wk	$152/wk

Salaries may vary and specific information may be obtained at your local telephone office.

HOURS OF WORK

Standard is the forty-hour week and schedules vary since twenty-four-hour service is required.

FRINGE BENEFITS

Depending on place and length of employment, you may receive the following:

- health insurance
- retirement plan
- paid vacation
- paid holidays
- disability insurance

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Contact the personnel director at the local phone company for further information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Communications Workers of America
1925 K. Street, NW
Washington, D.C. 20006

RELATED OCCUPATIONS:

JOB TITLE:	D.O.T.#:
Telephone Answering Service Operator	235.662-026
Telephone Service Representative	239.367-010
Teletype Operator	236.562-010

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: TELEPHONE SERVICE REPRESENTATIVE

A TELEPHONE SERVICE REPRESENTATIVE is a telephone company employee who assists new customers by informing them of available services. Representatives arrange for installation of telephone equipment in customers' homes and offices. They may be responsible for 1,500 to 2,000 customers' accounts and must handle complaints and non-payment of bills.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Pleasant telephone voice	Clerical	Freedom from speech defects
Good judgement	Numerical	Passing a physical examination
Initiative	Verbal	
Tact and patience		Good hearing and vision (natural or corrected)
Ability to persuade and to get along with others		Finger dexterity
Emotional stability		

YOU SHOULD KNOW THAT

-you must be at least eighteen and be a high school graduate
-one year of college or previous business experience may be required

YOU MUST BE ABLE TO

-perform routine tasks quickly and efficiently
-persuade customers to purchase telephone equipment and services
-use tact and remain calm when dealing with angry customers
-do basic math calculation, spell accurately, and use English correctly

D.O.T. 239.367-010

PREPARATION AND TRAINING:

High school training is the absolute minimum. Unless you have had at least one year of college, you will be required to have short prior work experience.

RECOMMENDED HIGH SCHOOL SUBJECTS:	Speech	Business Math
	English	Bookkeeping
	Typing	Shorthand
COURSE OF STUDY AFTER HIGH SCHOOL:	Psychology	Drama
	English	Math
	Bookkeeping	Speech
	Office Procedures	Social Science

ADDITIONAL FACTS ABOUT TRAINING

Six to eight weeks of telephone company training school is provided before you start to work. On-the-job training lasts twelve to eighteen months.

Completion of courses at junior college is preferred.

PROSPECTS AND OPPORTUNITIES:

JOB AVAILABILITY TRENDS

Qualified persons may find opportunities in most cities and towns. An increased need for service representatives has resulted from growth of the telephone industry. It is expected that this need will continue to grow. Automation has not affected the need for workers in this occupation. More openings are found in large cities.

ADVANCEMENT

A telephone service representative may become an office supervisor, business office supervisor, or service observer. Advancement is most often available to those who are ambitious and show initiative.

MORE ABOUT THE JOB:

Telephone service representatives perform the vital job of maintaining regular contact with and providing many kinds of services for telephone users. Much of the work of the service representative is done on the telephone in direct contact with the customer.

Duties include:

-recommending and selling types of telephone services to customers
-answering all kinds of questions regarding customer's bills
-handling customer's complaints
-arranging various payment schedules with customers when necessary

In addition to the work service representatives perform involving contacts with customers, they must also perform considerable related clerical work which includes the following:

-preparation of records required to complete orders to connect, disconnect, and change a customer's service
-posting of payments
-record filing
-record copying
-handling all kinds of customer correspondence
-filling out forms related to customer requests

Before being given actual responsibility, the beginning service representative spends several weeks in training learning the steps necessary to do the work successfully.

JOB CLUSTER #3

"Communication and Media"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	37-40	$174-$320/wk	$240-$260/wk	$174/wk

Salaries may vary in different areas.

HOURS OF WORK

The normal workweek is thirty-seven to forty hours, Monday through Friday. Hours are usually 8:00 - 5:00. Overtime work or work on weekends is rare.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

profit sharing	paid vacation
health insurance	retirement program
life insurance	sick leave

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs.
You may contact a youth representative at your local Employment Service Office

Contact the personnel director at your local telephone company for further details.

ADDITIONAL SOURCES OF INFORMATION:

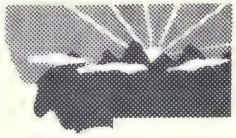
Your school counselor and librarian may also help you find additional information

Alliance of Independent Telephone Unions
P. O. Box 5462
Hamden, CN 16518

Communications Workers of America
1925 K Street, NW
Washington, D.C. 20006

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Claims Clerk (insurance)	241.362-010
Deposit Clerk (light, heat & power)	241.267-026
Library Assistant	100.367-018
New-Account Clerk (clerical)	205.362-026
Safe-Deposit Clerk (banking)	295.367-022



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: TELEPHONE EQUIPMENT INSTALLER

TELEPHONE EQUIPMENT INSTALLERS are skilled employees of telephone companies who install telephones and related equipment in homes.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Courteous	Mechanical	Good general health
Adaptable	Numerical	Good vision and hearing (natural or corrected)
Like outdoor activities		Physical stamina and strength
		Good eye-hand coordination
		Able to distinguish colors

YOU SHOULD KNOW THAT

- part of your job as an equipment installer will be to convince customers to purchase service on the basis of your recommendations
- telephone industry work is stable the year round and good workers can expect well paying and interesting careers

YOU MUST BE ABLE TO

- meet and deal with customers while acting as a representative of the company
- handle problems in the field correctly and without direct help
- work above the ground from telephone poles
- operate a light truck
- use a variety of hand tools
- work indoors and out in all kinds of weather and work from ladders above ground

DOT 822.381-010

PREPARATION AND TRAINING:

The telephone equipment installer should have a high school education to qualify. He/she will receive extensive and regular on-the-job training.

COURSE OF STUDY - HIGH SCHOOL

English	Physics
Algebra	Shop
Electronics	

On-the-job training includes safety methods, climbing poles, use of tools and their care, and other non-technical subjects. Also taught is electrical and electronic theory and standard first aid.

ADDITIONAL FACTS ABOUT TRAINING

Knowledge of electricity and electrical principles is necessary and participation in hobbies in this field are valuable as preparation. Armed service training in electricity and related fields is extremely helpful.

PROSPECTS AND OPPORTUNITIES:

JOB AVAILABILITY TRENDS

Opportunities for station installers are expected to remain stable for the next several years.
At present there are limited number of opportunities throughout Montana.

ADVANCEMENT

The more formal education and experience one has, the greater are the chances for promotion. Some higher positions which a telephone equipment installer may achieve are central office equipment persons, PBX repairer, PBX installer, transmissions person and management jobs.

MORE ABOUT THE JOB:

Equipment installers are a direct link between a telephone company and the public it serves.

Installers work directly with the customer. Their duties are:

-hooking up the customer's telephone in the home
-connecting the customer's line to a nearby telephone line
-discussing with customers their service needs
-suggesting various services and their costs
-driving a light truck
-climbing and working from telephone poles
-keeping trucks properly stocked and equipped

Installers work with hand tools regularly. These include pliers, screwdrivers, wire cutters, drills, pole climbing equipment and ladders.

All installers are taught and constantly practice safe working techniques in the course of their work.

JOB CLUSTER # 13

"Communication and Media"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$170-$375/wk	$250/wk	$170/wk

Salaries may vary in different areas. You may wish to check a local source for accurate salary information for your area.

HOURS OF WORK

The normal workweek is forty hours. The week may include Saturdays. Overtime is not unusual.

FRINGE BENEFITS

Depending on place and length of employment, you may receive the following:

paid vacation
paid holiday
paid sick leave
retirement and savings plan
group life and health insurance
medical plan

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Contact the personnel director of your local telephone company for further details.

ADDITIONAL SOURCES OF INFORMATION:

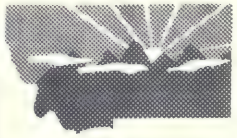
Your school counselor and librarian may also help you find additional information

Communication Workers of America
1925 K. Street, NW
Washington, D.C. 20006

International Brotherhood of Electrical Workers
1200 15th Street, NW
Washington, D.C. 20005

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Central officer repair person	822.281-014
Communications engineer (light, heat, power)	823.131-010
Maintenance inspector (telephone)	822.261-018
Central officer installer	822.361-014
Line person (telephone)	821.261-014



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: TELEGRAPHIC OPERATOR (D.O.T. TELEGRAPHIC-TYPEWRITER)

TELEGRAPHIC-TELETYPEWRITER OPERATORS send telegraph messages automatically through a specialized typewriter which converts typed messages electronically so that they may be wired instantly.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Tact	Clerical	Normal health
Discreet	Verbal	Good vision and hearing (natural or corrected)
Accurate		
Attention to detail		Good eye-hand coordination
Tolerate routine tasks		

YOU SHOULD KNOW THAT

- -Workers with handicaps of the legs and feet may often qualify if they move around the office without difficulty;
- -Working conditions are clean and safe, but may be noisy for machine operations.

YOU MUST BE ABLE TO

- -Work while sitting for long periods at a time;
- -Perform rapidly and with perfect accuracy at times when speed is important;
- -Perform one basic operation--typing messages--routinely;
- -Keep messages confidential by avoiding discussion of them with co-workers and friends.

DOT 203.582-050

PREPARATION AND TRAINING:

Teletype operators must be high school graduates, and can benefit from at least one year of college training. They will be given training on the job.

COURSE OF STUDY:

High School: Courses in typing are essential. Skill in grammar and proper usage of words are important.

College: Classes in typing, business machines, and other courses in business are recommended.

On-the-job: Training includes instruction in particular machine or machines you will operate and usually lasts one to three months.

ADDITIONAL FACTS ABOUT TRAINING:

To qualify, you must be proficient at touch typing and type at least forty to forty-five words per minute. Tests of typing skills are given to applicants by employers. Some operators qualify by performing similar work in the armed forces.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities are good for those with training and experience.

Some companies will train those with good general typing skills.

Opportunities are best in the large urban areas.

Opportunities throughout Montana are limited.

ADVANCEMENT

Advancement opportunities depend somewhat on the size of the employing company.

Large companies and public agencies promote operators to jobs as supervisor or chief operator.

In smaller companies which employ only one or two operators, promotion may be to another type of job such as secretary at a higher pay scale.

Most companies and public agencies offer regular pay raises.

MORE ABOUT THE JOB:

Telegraphic-typewriter (teletype) operators may send and receive messages which are typed and transmitted by the use of an electrically operated telegraphic typewriter. They are employed by telephone and telegraph companies, by public agencies, and by a variety of other businesses.

Duties may vary depending on the exact nature of the employer. Standard tasks performed by most teletype operators include:

-Sending messages by typing on a keyboard similar to that of a standard typewriter;
-Receiving messages over a telephone or on a tape;
-Reading incoming messages to find errors and omissions;
-Typing dates, times, and serial numbers of messages received;
-Typing messages received on tapes to regular paper for reading.

Some teletype operators are required to spend considerable time doing telephone work for the purpose of taking messages to be sent, and reading messages received.

Several types of telegraphic typewriter systems are in use and the operator may be known by the name of the system used such as: teletype operator, multiplex machine operator.

JOB CLUSTER #3
"Communications and Media"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$180-$275/wk	$230/wk	$180/wk

Salaries may vary throughout the state. You may wish to check a local source for accurate salary information for your area.

HOURS OF WORK

The usual workweek is forty hours per week Monday through Friday. Many operators, those employed by telegraph companies in particular, are required to work nights and on weekends.

FRINGE BENEFITS

Depending on place and length of employment, you may receive:

paid vacation
sick leave
paid holidays
reduced rates for telephone and telegraph service
group insurance
retirement plan
premium pay for overtime and night work

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

The personnel manager of your local phone company can provide further information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Communications Workers of America
1925 K Street, N.W.
Washington, D.C. 20005

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Wires transfer clerk	203.562-010
Braille machine operator (print. and pub.)	203.582-010
Cryptographic machine operator	203.582-018
Transcribing machine operator	203.582-058

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: TELLER (Financial Institution)

A TELLER receives and pays out money, and keeps records of money and negotiable instruments involved in various banking and other financial transactions. Tellers receive checks and cash for deposit, verify amounts and examine checks for endorsements. They enter deposits in depositors' passbooks or issue receipts. Tellers cash checks and pay out money upon verification of signatures and customer balances.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Honest	Count quickly and accurately	Good general health and stamina
Responsible	Numerical	Good hearing and vision (natural or corrected)
Enjoy working with people	Clerical	Normal eye-hand coordination
Friendly		Good use of hands and fingers
Neat in appearance		Normal use of legs
Accurate and aware of detail		

YOU SHOULD KNOW THAT

-part-time work may be available;
-work is not physically demanding;
-working conditions are pleasant;
-prolonged standing;
-routine work;
-on some occasions, long hours.

YOU MUST BE ABLE TO

-work while standing in one place most of the day;
-maintain a cordial and friendly attitude toward large numbers of people for long periods of time;
-handle occasional disturbed or angry customers with tact and patience;
-for many jobs, you must be able to type.

DOT 211.362-018

PREPARATION AND TRAINING:

Bank tellers must, in most cases, be high school graduates. They can benefit from formal training beyond high school, but will be trained on the job. On-the-job training varies from a few weeks to a year. It includes instruction in banking machines, clerical skills and bookkeeping methods.

It is very important that you display a mature attitude and appearance if you wish to find employment as a bank teller.

Typing, bookkeeping, and adding machine skills cannot be overemphasized as essential for employment.

An employing bank may give you tests to determine your arithmetic and clerical skills. Your past work record will be carefully investigated.

RECOMMENDED HIGH SCHOOL SUBJECTS:	Bookkeeping	Mathematics
	Typing	Speech
SPECIAL ENTRY REQUIREMENTS:	You must be bondable.	

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

There are numerous openings, especially in larger cities. It is expected that job openings will increase.

ADVANCEMENT

A teller may be promoted to note teller, loan teller, head teller, foreign exchange teller, etc. Usually, advancement comes with increased training and experience.

MORE ABOUT THE JOB:

In dealing with bank customers, the teller performs some of the following duties:

-receives and pays out money;
-records all transactions in which money, checks and other negotiated instruments are involved;
-issues receipts and marks money deposited and withdrawn from a customer's pass and checkbooks;
-cashes checks and checks customer's account balances;
-counts outgoing and incoming cash.

Other tasks which the teller may perform include:

-opening accounts for customers;
-selling money orders and traveler's checks;
-accepting utility payments;
-counting money using an adding machine;
-figuring interest and discounts on customer transactions and accounts;
-photographing records using microfilm machine;
-performing bookkeeping duties by hand or machine.

JOB CLUSTER #2

"Business and Office

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
35-40*	$130-175/wk	$165/wk	$130/wk

*Many banks now have part-time tellers.

HOURS OF WORK

The normal workweek is forty hours, Monday through Friday. Night work and overtime are rare. Many tellers are employed part-time, from 9:30 to 3:30, Monday through Friday.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

paid vacations and holidays
retirement plan
health plan
premium pay for overtime
group insurance
free banking services

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Check at your local bank for further information.

ADDITIONAL SOURCES OF INFORMATION:

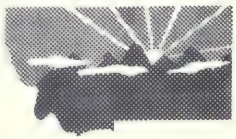
Your school counselor and librarian may also help you find additional information

National Bankers Association
4310 Georgia Avenue N.W.
Washington, D. C. 20011

American Bankers Association
Bank Personnel Division
1120 Connecticut Avenue N.W.
Washington, D. C. 20036

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Cashier	211.362-010
Post Office clerk	243.367-014
Title examiner	199.287-010



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: THEATER MANAGER

The THEATER MANAGER coordinates and supervises business, personnel, and publicity for stage production and motion picture houses.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Prefer a variety of duties	Verbal	Normal hearing & eyesight
Like to control and plan an entire activity	Numerical	Average physical condition
Enjoy evaluating information	Clerical	Good physical health
	Organizational	Able to move about a great deal of the time

YOU SHOULD KNOW THAT

- -The theater managers must know the attendance pattern and tastes of their community in order to schedule movies that will appeal to the group they serve;
- -Theater managers can be employed in hard top or drive-in theaters;
- -Theater managers, in order to be successful, should have sales ability, good business sense, imagination, and an attractive personality.

YOU MUST BE ABLE TO: -Get along with people, film distributors, customers, unions, local business and community leaders, and your own employees;

- -Recognize good projection and proper sound and insist that your projectionist provide it;
- -Supervise cashier, ushers, door people, and janitors to make sure their work is thorough and efficient;
- -Prevent mechanical failures which might mar the patrons' enjoyment of the film.

D.O.T. 187.167-154

PREPARATION AND TRAINING:

Although there are no formal educational requirements for the prospective theater manager, anyone who hopes to become one should have a high school education.

RECOMMENDED HIGH SCHOOL COURSES

English	Drama
Bookkeeping	Debate
Typing	Student Government
Public Speaking	

Many theater managers work their way up through the ranks after serving in a theater chain in some minor capacity. Some apply for management jobs after acquiring experience in advertising or public relations positions.

Experience in advertising is probably the most important background a person could have to qualify for assistant or manager positions. Proper advertising is a must.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities in the State of Montana are limited.

ADVANCEMENT

Big cities offer the greatest number of job openings, and large theaters offer greater opportunities for advancement than small ones.

MORE ABOUT THE JOB:

The theater manager:

-Manages theater or stage productions or motion pictures;
-Coordinates and supervises activities of personnel to insure efficient operation and promote patronage of the theater;
-Directs workers in making alterations and repairs in building;
-Manages financial business of the theater;
-Requisitions or purchases supplies.

Managers of drive-ins have extra responsibilities--they must make sure that the grounds are kept clean,that audio equipment is working properly and that safety and orderly traffic conditions are maintained in the theater and on adjacent highways.

Managers make up their own ads for newspapers and some for radio/T.V. but most radio and T.V. spots are furnished by screen advertising companies.

JOB CLUSTER #2
"Business and Office"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary

Some theater managers may work 60 hours per week. Salaries may range from $1000-$1500 per month, depending on experience. Many managers get a percent of the concessions as an incentive to display better and sell more. Salaries may vary throughout the state. You may wish to check a local theater for accurate salary information for your area.

HOURS OF WORK

The theater manager usually works more than a forty-hour week. He/she will put in late evening hours and weekends and holidays.

FRINGE BENEFITS

Depending on place and length of employment, you may receive the following:

paid vacations
profit sharing plan
life insurance
hospital insurance

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LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Talk to a manager of a local movie house for further information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Allied States Association of Motion Picture Exhibitors
1008 Fox Building
Detroit, Michigan 77001

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Manager, golf club	187.167-114
Manager, camp	187.167-066
Manager, convention (hotel and rest.)	187.167-078
Manager, recreation establishment	187.117-042
Manager, resident (hotel and rest.)	187.117-038

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: TICKET AGENT (AIRLINE)

TICKET AGENTS and RESERVATION AGENTS sell space on commercial planes to the air traveling public. These agents are key personnel as they are employees who make actual sales contacts with the public.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Enjoy working with people	Numerical	Stand much of the time
Be friendly and pleasant	Clerical	Good eyesight and hearing
Do precise work	Verbal	Normal use of arms and hands
Pleasant, clear-speaking voice	Writing	Good physical health
Good memory		
Neat appearance		

YOU SHOULD KNOW THAT

-Most airlines prefer to hire young people;
-You must have a clear, understandable speaking voice free of speech impediments;
-Much of the agent's work is routine and clerical in nature.

YOU MUST BE ABLE TO

-Lift baggage to be weighed in;
-Work any shift day or night. Shifts are bid on, and awarded according to seniority;
-Work weekends at times;
-Memorize schedules, exchange rates, and other detailed information;
-Maintain a patient, cheerful attitude while answering repeated questions.

D.O.T. 248.382-010

PREPARATION AND TRAINING:

High school graduation is a must for both types of agents. At least two years of college is strongly recommended for those who wish to be agents. Most airlines have no set experience requirements, stressing instead education and the ability to meet the public.

RECOMMENDED COURSE OF STUDY:

English
Public Speaking
Math
Sales
Typing

ADDITIONAL FACTS ABOUT TRAINING

In addition to the education required to obtain a job as an agent, most airlines provide training on the job. Also helpful as preparation is experience in sales and/or office work.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Turnover in this occupation is high, thus leaving job openings. There are limited opportunities throughout the State of Montana.

ADVANCEMENT

The Airline Ticket Agent may be promoted to a station manager or traffic supervisor, supervisor of agents, or chief agent.

MORE ABOUT THE JOB:

Airline Ticket Agents may work in an air terminal or in a ticket office located in a hotel or business district office. They help passengers plan their flights to suit their needs for speed, economy or sightseeing time. The Airline Ticket Agent arranges for special services, such as salt-free meals on board or wheel-chair service. The Ticket Agent makes reservations and may confirm them. The Agent figures costs of the tickets, issues them, receives payment and may weigh and check luggage.

JOB CLUSTER #15
"Transportation"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$850-$1000/mo	$900-$950/mo	$850-$870/mo

Salaries may vary. You may wish to check a local airline for accurate salary information.

HOURS OF WORK

The forty-hour workweek is standard. Agents work five days a week, and days off may fall during the normal workweek. They can rotate from day work to night work in the larger terminals which operate on a 24-hour basis.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

- paid vacation
- paid sick leave
- medical benefits
- group insurance
- free travel on the airlines

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office.

Employment Security Division
Box 1728
Helena, Montana 59601

ADDITIONAL SOURCES OF INFORMATION:

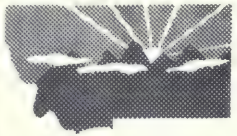
Your school counselor and librarian may also help you find additional information

Airline Dispatcher's Association
243 West Maple Avenue
Vienna, Virginia 22180

Air Transport Association of America
1709 New York Ave. N.W.
Washington, D.C. 20006

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Transportation Agent	912.367-014
Airline and Dispatch Clerk	248.367-010
Cargo Agent	248.367-018
Flight-Information Expediter	912.367-010



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: TIRE RECAPPER

TIRE RECAPPERS (VULCANIZERS) put new life in worn automobile, truck and tractor tires which still have sound castings. In effect, they rebuild old tires.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Careful work habits	Mechanical	Good health
Accurate	Spatial	Strong back
Precise	Numerical	At least average co-ordination
Responsible		

YOU SHOULD KNOW THAT

- Recappers are subject to certain hazards such as back injuries due to improper lifting procedures, burns from hot rubber, and cuts from machines in operation;
- In shops using automated equipment, workers with some handicaps (not affecting standing ability) are capable of performing some of the standard tasks.

YOU MUST BE ABLE TO

- Stand while working for many hours;
- Work in uncomfortable hot and smoky environments;
- Perform lifting, bending, stooping, pulling, and pushing operations during various stages of the vulcanizing process;
- Tolerate odors of burning rubber.

D.O.T. 750.685-014

PREPARATION AND TRAINING:

There is no formal schooling requirement. However, most employers prefer high school graduates.

RECOMMENDED COURSE OF STUDY

Metal Shop
Auto Shop
Business Courses
Automobile Mechanics

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Jobs exist in cities of all sizes; however, advances in automated tire recapping equipment means there will not be as rapid an increase in the number of workers as needed in the past.

There are opportunities throughout the state; however, they are limited.

ADVANCEMENT

For the young person with initiative and ability, there are many ways to advance to more financially rewarding jobs.

MORE ABOUT THE JOB:

Tire recappers, by retreading worn tires, make it possible for drivers to save money by giving their tires more usable life.

The journeyman tire recapper can do all phases of the vulcanizing operation.

The operation consists of the following steps:

- -Inspection of the casing to determine whether it is good enough to be reused; this includes checking the radial cracks, tread cuts, ply separations and other faults;
- -Buffing the excess rubber off the casing to create a smooth surface on the tread;
- -At the buffing stage, the tire is again checked out for defects;
- -Tire building, which consists of applying an adhesive cement and rolling on the cold rubber, curing the tire using steam or electricity to cure the rubber and form the tread;
- -The last process is trimming which involves repainting and trimming of retreaded tires before they are placed on sale.

Many recappers specialize in one or another of the above processes. However, the fully qualified journeyman is expected to know all the techniques.

JOB CLUSTER #9
"Manufacturing"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$3.75-$5.00/hr	$4.25/hr	$3.75-$4.00/hr

Salaries may vary throughout the state.

HOURS OF WORK

Hours of work range from forty to forty-eight per week with the worker being paid on an hourly basis. The workweek is Monday through Friday.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

paid vacation	retirement plan
paid overtime	sick leave
health insurance	employee discount

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LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Check with a local tire dealer for more information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information.

National Tire Dealers and Retreaders Association, Inc.
1343 L. Street, N.W.
Washington, D.C. 20005

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Electrode - cleaning - Machine Operator (elec. equip.)	559.685-062
Rubber Cutter (rubber goods; rubber tire & tubs)	559.685-158
Tire Repairer	750.684-050

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MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: TITLE EXAMINER

The TITLE EXAMINER searches legal documents related to the ownership of property. The job of the TITLE EXAMINER is to establish who has clear title to property.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Discreet	Intelligent	At least average health
Persistent	Numerical	Good vision
Tactful	Clerical	
Patient		
Attention to detail		

YOU SHOULD KNOW THAT

- -Tact is a necessity and confidence must be maintained;
- -Title examining involves a great deal of work requiring more than an average amount of patience;
- -Title examiners are necessary to both private businesses and government at all levels;
- -Eyes must be used for long periods in reading and examining details.

YOU MUST BE ABLE TO

- -Analyze problems and work them out logically;
- -Work patiently while maintaining accuracy and thoroughness;
- -Maintain mental alertness to spot omissions, exceptions, and discrepancies in records;
- -Write legibly and clearly.

D.O.T. 119.287-010

PREPARATION AND TRAINING:

A high school diploma is required by all employers. Most prefer workers with some college training.

RECOMMENDED HIGH SCHOOL COURSES

College preparatory major
Typing, office procedures
English
Speech

COURSE OF STUDY AFTER HIGH SCHOOL

Most colleges do not have degree programs relating directly to the job of title examiner, but you can get real estate, business law, economics, and similar courses.

ADDITIONAL FACTS ABOUT TRAINING

Entry level jobs are usually poster, searcher, or locator. These jobs then lead to the more responsible job of title examiner.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities are best in larger cities, particularly those which are county seats (land records are kept in county courthouses).

Opportunities throughout Montana are limited.

ADVANCEMENT

The employee who starts as a searcher or poster can advance to title examiner.

The examiner with experience and ability can advance to higher pay.

MORE ABOUT THE JOB:

Title companies exist to help buyers and sellers clear up any questions regarding ownership or title to property.

Most title companies have extensive records of land transactions in their area. They also work with the county recorder's office which holds all official records.

Title examiners check these records to determine property ownership. They may: check records until they find a starter which is the last acceptable statement of the condition of the title to the property involved; check all records after the date of the starter to see that there are no transactions which might affect the title to the property; locate maps of the property in question; occasionally make field inspection of the property; write abstracts on all pertinent legal documents relating to the property; and write a summary report of the investigation.

JOB CLUSTER #2
"Business and Office"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	From $10,000-$14,000		

Salaries for title examiners vary among companies and among sections of the country. A local source should be checked for accurate salary information for your area.

HOURS OF WORK

Working hours may vary. The forty-hour workweek is standard.

FRINGE BENEFITS
Depending on length and place of employment, you may receive:

- health insurance
- life insurance
- savings plan
- retirement plan

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LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Employment Security Division
Box 1728
Helena, Montana 59601

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

The Department of Education
National Association of Realtors
155 East Superior Street
Chicago, Illinois 60611

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Contract Clerk	119.267-018
Law Clerk	119.267-026
Title Searcher	209.367-046
Claim Examiner	241.267-018
Patent Agent	119.167-014

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: TOOL AND DIE MAKER

TOOL AND DIE MAKERS are highly skilled workers who make the tools and dies used in shaping and forming metal parts. Tool makers specialize in producing jigs and fixtures while die makers construct dies (metal forms).

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Thorough Precise Like detail work	Numerical Mechanical	Good general health Good vision Better than average ability to work with hands and fingers

YOU SHOULD KNOW THAT

- -You must have good mechanical ability to enter the field of tool and die making;
- -Safety precautions are important in this work and safety practices must be followed;
- -It takes four to five years as an apprentice or trainee to become a qualified tool and die maker;
- -Skilled tool and die makers are employable in various industries and can transfer from industry to industry with little trouble.

YOU MUST BE ABLE TO

- -Stand part of the time while operating machines;
- -Use all kinds of precision tools carefully and correctly;
- -Perform a variety of skilled operations involving the use of mathematical, mechanical, and electrical principles;
- -Read blueprints and work from them, maintaining near perfect accuracy;
- -Be knowledgeable in heat treating and strength of materials.

D.O.T. 601.280-046

PREPARATION AND TRAINING:

The tool and die maker should be a high school graduate. Tool and die making skills can be obtained through formal apprenticeship or equivalent on-the-job training.

COURSE OF STUDY:

High School: Math, Basic Sciences, Mechanical Drawing, Physics, Metal Shop, Electrical Shop, Machine Shop

College: Where available, a major in tool design or engineering is recommended; where not available, the following will provide good training:

classes in machine shop, blueprint reading, physics, mathematics, electricity

Apprenticeship Program: This combines on-the-job training and classroom instruction in the required skills.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Occupational projection for the years 1980-85 is, the industry expansion will be 10; replacement needs 0; total jobs available for this period, 10. Opportunities in Montana are limited.

ADVANCEMENT

Tool and die makers with strong training in mathematics, hydraulics, electricity, and basic sciences have many chances for advancement.

Many well trained tool and die makers become tool designers or advance to supervisory positions.

MORE ABOUT THE JOB:

The tool and die maker is a top flight machinist who makes tools, dies, molds, jigs, fixtures and gauges. The products of this art are the basis for the mass production of identical fabricated and formed metal parts, die castings, and molded plastics.

He/she makes tools that cut metal parts to shape and size, dies that shear, pierce, and form sheet metal pieces, stampings and forgings, steel molds for die castings,and plastic pieces, jigs and fixtures that position and hold workpieces for machining and assembly, and gauges that measure quickly and accurately.

He/she uses basic machine shop equipment such as laths, milling machines, shapers and grinders, and special tool room machines such as jig borers. Because the work must be extremely accurate, the machines used are more finely adjusted than their counterparts in the production departments.

Unlike the production machinist who is often limited to performing only certain operations, the tool and die maker usually does the entire job from selecting the raw stock to assembling and testing the finished tool. He/she works from drawings, sketches, or models, and plans and performs the entire sequence of operations. Generally he/she is the sole worker on an assigned job. Some of the large tool shops employ tool room machinists to do the machine work while the tool maker does the layout work, hand fitting and finishing.

JOB CLUSTER #10
"Manufacturing"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40			

The average hourly rate in 13 areas in the United States surveyed in 1978 is $8.32/hour. Tool and die makers are among the highest paid machine workers. Rates may vary throughout the state. Check local sources for accurate information in your area.

HOURS OF WORK

The normal workweek is forty hours. Many tool and die makers work on Saturdays.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

- paid holidays
- paid vacations
- retirement plan
- health plan
- overtime pay
- welfare plan

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LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information.
International Association of Machinists
1300 Connecticut Avenue, N.W.
Washington, D.C.

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Carbide operator (mach. shop)	601.380-010
Tool grinder operator	603.280-038
Press operator, heavy duty	617.260-010

D.O.T. Fourth Edition, page 491

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: TRAFFIC RATE CLERK

The TRAFFIC RATE CLERK, often known as RATE CLERK or FREIGHT RATE CLERK, is an essential figure in the transportation field. They are employed primarily by shippers and carriers in industry and commerce to determine rates for transporting freight.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Alert	Numerical	Normal vision and hearing (natural or corrected)
Even tempered	Clerical	Good speaking voice
Good memory		Hand and finger dexterity
Precise		
Accurate		
Persistent		

YOU SHOULD KNOW THAT

-You may be transferred from one industrial plant location to another throughout the country;
-You will be required to join a union.

YOU MUST BE ABLE TO

-Handle details;
-Have a good ability to read and use tables of numbers;
-Be proficient at typing;
-Concentrate intensely for long periods of time;
-Tolerate and work in offices that are noisy and next to dusty freight docks;
-Work under pressure meeting deadlines.

D.O.T. 214.362-038

PREPARATION AND TRAINING:

The traffic rate clerk is expected to be a high school graduate and have taken a business course in high school.

COURSE OF STUDY

Typing	Geography	Business Management
Bookkeeping	Transportation	Interstate Commerce Act
English	Business Law	Principles and Practice

ADDITIONAL FACTS ABOUT TRAINING

On-the-job training is provided by some employers. The most rapid advancement in the job is through additional training. Typing skill, a detailed knowledge of geography, and good English background are basic essentials to employment in this field.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

There is a need for well qualified traffic rate clerks.

Opportunities throughout Montana are limited.

ADVANCEMENT

The traffic rate clerk with additional training and experience can be promoted to: rate analyst, assistant traffic manager, traffic manager.

MORE ABOUT THE JOB:

Traffic rate clerks determine rates and charges applicable to freight shipments. The traffic rate clerk:

- -Examines shipping bills to obtain description of freight;
- -Classifies freight according to rate book description;
- -Consults rate schedule to obtain traffic rate for each item classified;
- -Computes total freight charge and records charges for shipping order;
- -Calculates and records storage, redelivery, and reconsignment charges;
- -Answers inquiries from shippers regarding rates, routing, packing procedures;
- -May examine bills of lading and file claims with transportation companies for overcharges;
- -May keep records of freight movements;
- -May keep record of freight tariffs and be designated traffic clerk.

JOB CLUSTER #15
"Transportation"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$180-$250/wk	$200/wk	$180/wk

Salaries may vary throughout the state. You may wish to check a local source for accurate salary information for your area.

HOURS OF WORK

Forty hours per week is standard. Hours are irregular and afternoon, evening or night work is common.

FRINGE BENEFITS

Depending on place and length of employment, you may receive:

- health and welfare plan
- pension plan
- vision and dental care
- paid vacations
- paid holidays

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LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office.

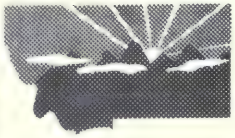
Contact a local or area freightway to make an appointment with their traffic rate clerk.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Account Analyst (banking)	214.382-010
Billing Clerk	214.382-014
Chief Payroll Clerk	215.137-014
Timekeeper	215.367-022



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: TRAVEL AGENT

The TRAVEL AGENT helps travelers plan their itineraries and select the transportation and accommodation best suited to their needs.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Poise	Clerical	Average health
Enthusiastic	Numerical	Good eyesight
Calm	Verbal	Full use of arms and hands
Well groomed	Legible and neat handwriting	
Able to get along with people		

YOU SHOULD KNOW THAT

-A minimum knowledge of bookkeeping and filing;
-You must be able to use the telephone, typewriter, and adding machine;
-Travel will help you to obtain a job and to advance on the job;
-You are usually trained on-the-job.

YOU MUST BE ABLE TO

-Read maps and ticket schedules;
-Deal effectively with all kinds of people;
-Work carefully with large masses of detailed information in a persistent way;
-Work accurately with arithmetic.

DOT 252.157-010

PREPARATION AND TRAINING:

High school graduation is a requirement. Some college training is required by many agencies.

RECOMMENDED COURSE OF STUDY:

- Foreign language
- Literature
- History
- Art
- Business machines
- Bookkeeping and filing
- Geography
- Business Math
- Typing
- Public speaking
- Traffic management course

ADDITIONAL FACTS ABOUT TRAINING

Most agencies are looking for maturity. At least twenty-five years is minimum for hiring. Most agencies train their employee for at least one year. Any traveling you have done is invaluable. Accuracy is a must.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Prospects throughout Montana are limited.

The best opportunities are near urban areas by long distance transportation facilities.

ADVANCEMENT

Advancement is in the form of raises.

With experience, you may be promoted to supervisor or office manager.

MORE ABOUT THE JOB:

The travel agent may be employed by local agency, international firm, or automobile association or transportation line.

A local retail agency sells packaged tours or designs special tours to meet individual needs. Here the agent must select and explain the tours which meet the traverler's interests as well as book reservations.

Administration and clerical tasks are:

- -Keep track of current consular requirements;
- -Explain passport and visa regulations;
- -Knowledge of import duties;
- -Routine correspondence and travel information.

Some agents may specialize in areas of travel abroad or domestic travel. Skillful use of schedules and tariffs is important.

JOB CLUSTER #12
"Marketing and Distribution"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$11,000-$18,000/yr		$11,000/yr

Check a local agency for accurate salary information in your area.

HOURS OF WORK
The forty-hour workweek is the rule. During the spring and early summer, the peak season, longer hours are usually required to keep pace with the demand for services.

FRINGE BENEFITS
Depending on length and place of employment and size of agency, you may receive:

- overtime pay
- permanent employment
- paid vacation
- health insurance
- paid holidays
- opportunity to travel

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Contact a travel agency representative about job prospects.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information.

American Society of Travel Agents
360 Lexington Avenue
New York, New York 10017

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Travel clerk (hotel and restaurant)	238.367-030
Guide, establishment (any industry)	353.367-014
Traffic Agent	252.257-010
Ticket Agent	248.382-010

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: TRUCK DRIVER, LIGHT

LIGHT TRUCK DRIVERS work within an area picking up, transporting and delivering materials, goods, and products of all kinds. They also perform related duties which may vary from job to job.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Courteous	Clerical	Normal physical strength and stamina
Patient	Numerical	Good eye-hand coordination
Able to work with others	Some mechanical	Normal use of hands and fingers
Alert		Full use of back, legs, and feet

YOU SHOULD KNOW THAT

-Hazards include normal driving risks of accidents in addition to nervous strain, back ailments and hernias from regular driving in traffic and from loading and unloading;
-The majority of truckdrivers are members of the teamster's union;
-You must have a valid driver's license to qualify.

YOU MUST BE ABLE TO

-Lift and carry weights up to 100 pounds on some jobs;
-Keep simple clerical records of items received and delivered and sometimes take money and make change;
-Drive regularly in heavy traffic and when necessary in all kinds of weather conditions.

D.O.T. 906.683-022

PREPARATION AND TRAINING:

There are no specific educational requirements for light truck drivers. Most training is on the job. Completion of high school is preferred.

COURSE OF STUDY

High School: Basic arithmetic, driver education, and driver training are recommended as good preparation. Auto and other shop classes are also beneficial.

On-the-job: Training is usually short and includes routes to be covered, operation of specific trucks, safety practices, and other job requirements.

ADDITIONAL FACTS ABOUT TRAINING

Your driving record is extremely important. It will be checked by employers. Your record must be good, free of excessive and serious driving violations.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

The projected opportunities in Montana indicate for the years 1980-90 are good.

Local truck drivers are employed by numerous wholesalers and retailers in such industries as food processing, clothing, furniture and a great many others.

ADVANCEMENT

Opportunities for advancement are few.

Advancement involves stiff competition due to the total number of drivers.

Usually, advancement takes the form of salary increases for driving specialized rigs.

MORE ABOUT THE JOB:

A truckdriver is likely to work out of a warehouse or terminal where the truck is loaded. In the course of a working day, the truckdriver will perform all or some of the following duties:

-Receive assignments for pickups and/or deliveries;
-Load or supervise loading of truck to be used;
-Arrange items in truck for ease of unloading;
-Drive to pickup and delivery destinations following the most efficient route.

Local truckdrivers who are employed by manufacturers, distributors, public agencies, wholesalers, retailers, and for themselves, transport various products from place to place in a metropolitan area. They may drive large or small trucks.

At stops during the day, the truckdriver may unload and load items alone, or if the load is extra heavy, may have a helper.

At stops, in addition to loading and unloading orders, the truckdriver: may get signed receipts for orders unloaded; may collect money in cash or checks.

Drivers turn in money and receipts at the day's end. They also report problems with their trucks when these occur which need to be checked by the mechanic.

JOB CLUSTER #15
"Transportation"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$7.00-$9.10/hr	$8.18/hr	$7.00/hr

Salaries may vary, depending on type of delivery and whether covered by union. In some areas, drivers are paid by the load or number of deliveries.

HOURS OF WORK

The basic workweek is five days with a total of forty hours per week. Some drivers work early in the morning. Many work on Saturdays.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

paid vacations and holidays
health and welfare plan
retirement plan
group insurance

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

American Training Associations
1616 P Street, N.W.
Washington, D.C. 20036

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Concrete-mixing truckdriver	900.683-010
Dump-truck driver	902.683-010
Tank-truck driver (petrol., refin.)	903.683-018
Armored car guard and driver	372.563-010
Explosives-truck driver	903.683-010

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: TYPESETTING OPERATOR

TYPESETTING MACHINE OPERATORS are skilled workers who put newspaper copy, written by reporters, into metal type. They also may set copy for advertisements or for books, brochures, and other publications. They may be known as linotype, intertype, or teletype setting operator.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Dependable	Mechanical	Good health
Precise	Some verbal	Good eyesight
Good grammar		Eye-hand coordination
Attention to detail		

YOU SHOULD KNOW THAT

-An apprenticeship period of four to six years is common;
-There are risks of burns from molten metals;
-You may have to carry type magazines weighing fifty to eighty pounds.

YOU MUST BE ABLE TO

-Learn to operate a typesetting machine which produces metal type;
-Work under pressure to meet deadlines;
-Adjust to routine work situations;
-Concentrate and work under noisy conditions.

D.O.T. 650.582-018

PREPARATION AND TRAINING:

A high school education is required to qualify for the apprenticeship program.

HIGH SCHOOL SUBJECTS:

English	spelling	graphic arts
typing	metal shop	machine shop
print shop		

COURSES AFTER HIGH SCHOOL:

graphic arts	typing	machine shop
print shop	English	machine tools
lithography	printing methods	

ADDITIONAL FACTS ABOUT TRAINING:

A formal apprenticeship program is sponsored by the typographical union. The program lasts for four to six years and is offered by most employers of typesetting machine operators.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Opportunities may be better in letter shops than in the newspaper industry.

ADVANCEMENT

The skilled operator who shows leadership qualities and the ability to solve production problems may advance to assistant supervisor or supervisor.

MORE ABOUT THE JOB:

Typesetting machine operators transpose typewritten copy into metal slugs which make printing impressions. They operate a keyboard which transfers brass matrices into a metal casting unit from which the slugs are made with molten lead.

Duties of the typesetting machine operator include:

-Selecting the proper size and style of type to be set;
-Adjusting the machine to set lines the right length;
-Operating the keyboard to assemble matrices into the order indicated on the copy;
-Balancing lines and adjusting line widths by hand;
-As each line is completed, pressing a hand lever which sends them to be molded in lead;
-Transferring completed copy to the composing table for proofing;
-Keep the machine supplied with lead pigs which are melted down in a heating unit attached to the typesetter;
-Work with a teletype setter, a tape perforating machine;
-Clean, oil, or make adjustments on the machine.

JOB CLUSTER #3
"Communications and Media"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	40	$9.00-$9.40 an hour		

Salaries may vary throughout the state. You may wish to check a local source for accurate salary information for your area.

HOURS OF WORK

The normal workweek for newspaper typesetting machine operators includes night shifts, Saturday and Sunday work. The workweek in letter shops is more regular.

FRINGE BENEFITS
Depending on length and place of employment, you may receive:

paid vacations
paid overtime
paid holidays
retirement program
health insurance
life insurance

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LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office.

Check with your local employment service for further information on the apprenticeship program.

ADDITIONAL SOURCES OF INFORMATION:

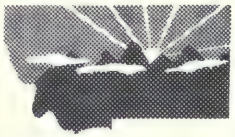
Your school counselor and librarian may also help you find additional information.

Graphic Arts Technical Foundation
4615 Forbes Avenue
Pittsburgh, Pa. 15213

International Typographic Composition Association, Inc.
2233 Wisconsin Avenue, N.W.
Washington, D.C. 20007

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Monotype-Keyboard Operator (print. & pub.)	650.582-014
Phototypesetter Operator (print. & pub.)	650.582-022
Typesetting-Machine Tender	650.685-010



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: VETERINARIAN

The VETERINARIAN diagnoses, treats, and controls the numerous diseases and injuries afflicting animals.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Dependable	Scientific	Good general health
Thorough	Numerical	Normal vision and hearing (natural or corrected)
Calm	Verbal	Eye-hand coordination
Alert	Intelligent	Color perception
Good memory		Physical stamina

YOU SHOULD KNOW THAT

-You can specialize in treating small or large animals, pets or farm livestock;
-Strength and stamina are very important, especially in large animal treatment;
-There are openings in private practice, state and governmental agencies, in teaching and consultant work.

YOU MUST BE ABLE TO

-Complete educational requirements with a good academic record;
-Pass a state examination including written and clinical testing;
-Enjoy working with animals and stand the sight of disease, blood, and dead animals;
-Learn and apply great amounts of scientific and technical information.

DOT 073.101-010

PREPARATION AND TRAINING:

The veterinarian candidate must meet the following educational and training requirements:

-Completion of high school with a good academic record;
-Completion of at least two years of pre-veterinary college training with good standing;
-Completion of a four-year course at an approved school of veterinary medicine plus some clinical or in-the-field experience.

RECOMMENDED COURSES:

High School: The high school student should undertake such courses as anatomy, physiology, chemistry, biology and math.

Pre-veterinary courses: This training should include instruction and study of chemistry, zoology, animal husbandary, physics, math and English.

Veterinary School: In veterinary school, you will receive classroom and laboratory instruction in animal husbandary, animal diseases and treatment, chemistry, physiology and other areas. You also receive experience through clinical work. The degree given upon completion of the four-year program is the doctor of veterinary medicine (DVM).

ADDITIONAL FACTS ABOUT TRAINING

Because of the limited number of approved veterinary schools, admission standards are strict and prior scholastic records are very important. After completing the educational requirements, you must pass a rigid state examination which includes both written and clinical tests.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

The need for replacements and the growing demand for veterinary services, when compared with the limited number of veterinarians that existing schools can educate each year, point to continued favorable opportunities for veterinarians.

Opportunities are often best in large agricultural areas for the health of livestock is of extreme importance.

ADVANCEMENT

Advancement usually comes in the form of increased customers and salary.

MORE ABOUT THE JOB:

The practicing veterinarian:

-Diagnoses and treats diseases of animals;
-Performs surgery on sick or injured animals;
-Prescribes and administers drugs and other medicines;
-May care for small pets or zoo animals;
-May have to do emergency work in farm fields or barns;
-May have to face injured animals which are often vicious;
-Faces the hazards of becoming infected by sick animals;
-Often has to struggle alone with large animals;
-Keeps records of treatments used.

The veterinarian may be employed by:

-Self as a private practitioner;
-Another veterinarian in private practice;
-A small or large animal hospital;
-A veterinary medicine clinic;
-A governmental body as an animal inspector, herd inspector, or slaughter house inspector;
-A college or university as an instructor or clinical veterinarian;
-A firm which manufactures veterinary medicine;
-A private zoo or animal sale agency.

JOB CLUSTER #8
"Health"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	40-60			

Veterinarians' earnings are commensurate with their years of study and training. Surveys taken in 1974 at several colleges of veterinary medicine showed that starting salaries for new graduates that year ranged from $18,000 to $20,000 a year. Veterinarians employed by the government had starting salaries between $20,000 and $23,000 in 1980.

HOURS OF WORK
Veterinarians in private practice often set their own hours. Overtime and weekend work is quite common as most veterinarians remain on emergency call twenty-four hours a day.

FRINGE BENEFITS
Depending on length and place of employment, you may receive:

life insurance	sick leave	holidays
health plan	retirement plan	vacations

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

A local Veterinarian can provide further information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

American Veterinary Medical Association
930 North Meacham Road
Schaumburg, ILL 60172

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Veterinarian, Poultry	073.101-014
Public health veterinarian	073.101-010
Veterinary radiologist	073.101-010
Animal care, Veterinarian Laboratory	073.061-010
Veterinary Pathologist	073.061-030

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: WAITER AND/OR WAITRESS

WAITERS AND WAITRESSES are employees who serve food or refreshments to guests. They are salespersons in restaurants. An important part of their job is to give good service to customers so that they will return.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Good grooming	Clerical	Normal strength & stamina
Courteous	Numerical	Normal use of legs & feet
Able to take orders		Good vision & hearing
		Full use of the back
		Ability to use hands & arms & fingers

YOU SHOULD KNOW THAT

-waiters and waitresses must be free of communicable diseases
-some hazards of the job include burns from hot food and falls from walking on slippery kitchen floors
-most waiters and waitresses wear some kind of uniform
-you may have to join a union

YOU MUST BE ABLE TO

-follow instructions given by both customers and supervisors
-deal with many types of people with courtesy and tack regardless of their mood or yours
-be on your feet for hours at a time
-reach for, handle, hold, and carry trays, plates, and dishes without dropping them and as quietly as possible -lift loads up to twenty pounds

DOT 311.477-030

PREPARATION AND TRAINING:

A high school education is desirable, but not required for most jobs. Nearly all waiters and waitresses are trained on-the-job.

On-the-job training includes types of food service provided by the restaurant or hotel as well as other services offered. An inexperienced employee may begin working as a table busser.

You may want additional training in college if you plan to go into management. On-the-job training is available for advancement.

RECOMMENDED HIGH SCHOOL COURSES INCLUDE: -basic arithmetic
-public speaking
-food service

ADDITIONAL FACTS ABOUT TRAINING

You must be able to perform simple arithmetic to qualify as a waiter or waitress. A health card which may be obtained from your county public health department at no charge is required for employment.

PROSPECTS AND OPPORTUNITIES:

JOB AVAILABILITY TRENDS

More jobs are found in small restaurants. Many part-time jobs are available. Employment opportunities are expected to increase through the mid-1980's.

ADVANCEMENT

Opportunities are limited, but a waiter or waitress may become cashier, hostess, or head waiter, or move to a restaurant where tips are better. Some persons may become restaurant managers.

MORE ABOUT THE JOB:

You must be able to follow a routine in your approach to customers which will reflect the image of the type of establishment for which you work.

In addition to serving food and drinks, waiters and waitresses working when speed of service is emphasized may also

- -set up and clean tables
- -do cashier's work
- -carry dishes from the table to the kitchen
- -work at the counter as well as wait on tables

Waters and waitresses working where customer satisfaction is emphasized may

- -advise customers on wine selection
- -prepare certain dishes and salads at a side table
- -answer questions about items on the menu
- -perform additional personal services for the customer

In the more elaborate restaurants, the duties of clearing dishes, cashiering and others are performed by table bussers, cashiers and other employees.

A general knowledge of all food services is of the utmost importance for advancement.

JOB CLUSTER #13

"Personal Services"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$130-$150 & tips/wk		

Tips generally average between 10 and 20 percent of guests' check. The amount of tips varies with the kind of eating place, location, clientele and prices of food and drinks.

Salaries may vary throughout the state. Check a local source for accurate information on salaries.

HOURS OF WORK

Full-time waiters and waitresses usually work forty hours a week. Split shifts are common as is weekend and night work.

FRINGE BENEFITS

Depending on place and length of employment, you may receive the following:

paid vacation	pension plan	profit sharing
group insurance	furnish uniform	
health and welfare plans	free meals while on duty	

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs.
You may contact a youth representative at your local Employment Service Office

Talk to a waitress/waiter in a local eating establishment.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Council on Hotel, Restaurant
and Institutional Education
1522 K St. NW
Washington, D.C. 20005

RELATED OCCUPATIONS:

JOB TITLE	D.O.T.#
Counter Attendant, Lunchroom or Coffee Shop	311.447-014
Counter Attendant, Cafeteria	311.677-014

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: WARD CLERK

The WARD CLERK works in the ward or floor nursing unit under the supervision of a registered nurse where he/she keeps records, directs visitors and performs other receptionist duties.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Courteous	Clerical	Good physical health
Tactful	Numerical	Use of both hands
Emotionally stable	Verbal	Normal hearing
Discreet	Work well under pressure	Free of communicable diseases
Pleasant cheerful manner		
Neat appearance		

YOU SHOULD KNOW THAT

- -You cannot have a police record for any criminal offense other than minor traffic violations;
- -You should not have a speech problem or handicap;
- -You must treat confidential information with discretion.

YOU MUST BE ABLE TO

- -Perform routine duties on a continuous basis and work under close supervision;
- -Use English and spell correctly;
- -Write legibly and read with at least a high school level comprehension;
- -Speak clearly and pleasantly when dealing with others.

DOT 245.362-014

PREPARATION AND TRAINING:

High school education is usually required for entry into some of these jobs. Basic clerical training is available in high schools, adult education centers, colleges, and private business schools.

HIGH SCHOOL SUBJECTS

English	Arithmetic
Spelling	Clerical Practice
Typing	Record Keeping

COURSES AFTER HIGH SCHOOL

Medical Assisting	Typing
Medical Terminology	Shorthand
Bookkeeping	Records Management
Business English	Clinical Practices

ADDITIONAL FACTS ABOUT TRAINING

You will receive some on-the-job training upon employment. Any experience in clerical work will be extremely helpful and will lead to more rapid employment and advancement.

A course for medical secretaries is offered at some vo-tech centers.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Job opportunities at present are limited.

Most ward clerks are employed in large hospitals where patient load and visitor traffic is heaviest.

ADVANCEMENT

There is no formal line of promotion.

Clerks with post high school training may be promoted to higher level clerical jobs.

MORE ABOUT THE JOB:

The ward clerk is responsible for the accuracy and correctness of all records. He/she delivers messages, reports needed repairs of equipment and facilities, acts as a receptionist, and may receive and direct visitors.

Other duties may include:

-Answering the telephone;
-Relaying messages;
-Receiving and directing visitors;
-Handling complaints;
-Assisting and receiving patients;
-Assembling patients' charts;
-Checking patients' records for completeness;
-Making requisitions;
-Preparing reports and records for nurses;
-Using a typewriter;
-Recording temperature, pulse, and respiration on charts;
-Transcription of doctor's orders.

JOB CLUSTER #8
"Health"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$130-$180/wk	$145-$160/wk	$130/wk

Salaries may vary throughout the state. You may wish to check a local source for accurate information for your area.

HOURS OF WORK
The ward clerk usually works a standard eight-hour shift, five days a week. The shift may be morning, afternoon or night and may vary from week to week. The work may be weekends with days off during the week.

FRINGE BENEFITS
Depending on length and place of employment, you may receive:

- health insurance
- retirement plan
- paid vacation and holidays
- sick leave

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Contact the personnel director of your local hospital for further information.

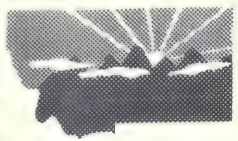
ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

American Hospital Association
840 North Lakeshore Drive
Chicago, Illinois 60611

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Correspondence clerk	209.262-010
Medical laboratory assistant	078.381-010
Shipping and receiving clerk	222.387-050



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: WAREHOUSE WORKER

The WAREHOUSE WORKER is basically responsible for the storage and movement of materials of all kinds in warehouses or other storage areas.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Reliable	Clerical	Good physical condition
Honest	Some mechanical	Average or above stamina
Able to follow instructions		Good vision and hearing (natural or corrected)
Prefer routine tasks		Normal eye-hand co-ordination
		Full use of arms and legs

YOU SHOULD KNOW THAT

-Much of your work as a warehouse worker will be of a routine nature;
-You can learn the work of a warehouse worker in a matter of a few weeks;
-Hazards of the job include injury from falling objects such as crates;
-Your previous work record is most important in finding employment as a warehouse worker.

YOU MUST BE ABLE TO

-Lift and carry;
-Regularly perform reaching, handling, and grasping operations in the process of working with stores and materials;
-Keep simple but accurate written records of materials in your charge.

D.O.T. 922.687-058

PREPARATION AND TRAINING:

High school education is recommended but is not absolutely necessary for finding a job. You will receive on-the-job training.

COURSE OF STUDY

High School: The high school course should include training and basic arithmetic, English, and shop courses. Also recommended is full participation in physical education to develop physical strength and stamina.

On-the-Job Training: Training will be given in storage techniques, elementary record keeping, and related skills needed for the particular job. Also taught are safe working habits and safety regulations.

ADDITIONAL FACTS ABOUT TRAINING

A high school education is helpful since competition for warehouse workers is stiff. You do not need an above average high school academic record to qualify as a warehouse worker. Most important is evidence of reliability, honesty, and good, safe working habits. Some employers will require evidence of previous work experience before they will employ you.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

The actual number of jobs is declining due to the widespread use of automated methods of material storage and movement.

Opportunities are limited throughout Montana.

ADVANCEMENT

Advancement opportunities are limited.

Warehouse workers with several years experience may advance to positions as warehouse supervisor in a large warehouse.

Warehouse workers who wish to increase advancement opportunities should seek additional education.

MORE ABOUT THE JOB:

Warehouse workers may work in one or two types of warehouses, public and private. Public warehouses store goods for customers. Private ones are operated by manufacturers and retailers such as department stores and others to store their own products and goods.

Warehouse workers' duties are essentially the same in either type of operation. Duties which the warehouse workers perform may include the following depending on the size of the warehouse and the way it is organized:

- -Moving goods from receiving areas by hand or power to storage areas;
- -Storing goods in a manner prescribed by the warehouse, including stacking, arranging, or other systematic procedures;
- -Marking goods with pencil, crayon, or other marking tools so that they may be easily identified and found;
- -Opening crates and boxes and other containers;
- -Filling requests for goods stored in the warehouse by taking and following written or spoken instructions;
- -Moving loads of goods about the warehouse area using power equipment such as fork lifts or moving goods by hand;
- -Keeping records of incoming and outgoing material;
- -Weighing and counting goods when required;
- -In some cases, making minor repairs to items in the warehouse.

JOB CLUSTER #11
"Marketing and Distribution"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	40	$7.00-$7.25/hr	$7.15/hr	$7.00/hr

Salaries may vary throughout the state.

HOURS OF WORK

The normal workweek consists of forty hours. Overtime is not unusual when large shipments enter or leave warehouses. Many warehouse workers work Saturdays and receive a day off during the week.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

paid vacations and holidays
retirement plans
group insurance

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Employment Security Division
Box 1728
Helena, Montana 59601

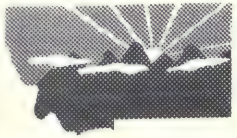
ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Warehouse and Mail Order Employees Union
Local 743
220 South Ashland Boulevard
Chicago, Illinois

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Dumper	921.667-018
Material handler	929.687-030
Locker plant attendant	922.684-010
Returned goods sorter	922.687-086
Returned case inspector (malt liquor)	929.687-038



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: WATCH REPAIR TECHNICIAN

WATCH REPAIR TECHNICIANS must be able to discover what is wrong with a broken watch or clock; estimate the cost of repairs; and do the work. Sometimes they make new parts for clocks or watches. They also do routine cleaning and adjustment of timepieces. This occupation offers a rewarding future as a member of a widely respected craft.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Ambitious	Spatial	Good eyesight
Conscientious	Numerical	Form and color perception
Courteous	Mechanical	Finger dexterity
Even temperament		
Honest		
Neat		
Patient		

YOU SHOULD KNOW THAT

-Watch repair technicians may be expected to furnish their own hand tools and in some instances their own laths, cleaning machines, demagnetizers and timers;
-There are openings for young people willing to work hard at a low wage while learning the precision skills.

YOU MUST BE ABLE TO

-Understand mechanical principles;
-Work with small laths, light soldering and welding equipment;
-Use a buffer and timing machine.

D.O.T 715.281-010

PREPARATION AND TRAINING:

High school graduation is preferred but not required. You should know that you will have a better chance of getting and holding a job if you complete school.

RECOMMENDED HIGH SCHOOL SUBJECTS

Basic arithmetic, physical science, mechanical training

COURSE OF STUDY AFTER HIGH SCHOOL

Watchmaking must be learned through going to a school specializing in the trade or through an apprenticeship. The American Watchmaker's Institute, P.O. Box 11011, Cincinnati, Ohio 45211, can give you information on all acceptable schools.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

At present, opportunities throughout Montana are limited.

Employment should remain stable but will not increase.

ADVANCEMENT

Promotions do not come rapidly as most shops are small.

The best avenue of advancement usually lies in self-employment as the watchmakers already own their own tools.

MORE ABOUT THE JOB:

Frequently, watchmakers or watch repair technicians are proprietors of jewelry stores. In addition to doing watch repair work, they do jewelry repair and sell watches, jewelry, silverware and other items. They may hire and supervise sales clerks, other watch jewelers and engravers. They may also arrange window displays, purchase goods to be sold and handle other managerial duties.

The repair of a watch may include the following:

- -Removing the entire movement from the case;
- -Examining working parts, such as the hands, dials and balance wheel assembly;
- -Replacing mainsprings, hair springs, balance and other wheels, stems and crowns, and hands or broken jewels;
- -Adjusting improperly fitted wheels and other parts;
- -Cleaning and oiling parts before reassembling.

Watch repair technicians use the following equipment:

- -Timing machines;
- -Cleaning machines;
- -Pliers;
- -Screwdrivers
- -Tweezers
- -Electrical meters.

JOB CLUSTER #10
"Manufacturing"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40-44	$192-$300/wk	$270/wk	$192/wk

For the self-employed who operate their own shop, earnings may run considerably higher.

HOURS OF WORK

Salaried watch repair technicians may work forty to forty-eight hours a week. Saturday almost always is a work day. Self-employed watch repair technicians frequently work more than forty-eight hours.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

- overtime pay
- paid vacation
- retirement plan
- medical and life insurance

VV10579

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Talk to a watch repairer in a local jewelry store.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

Retail Jewelers of America, Inc.
1025 Vermont Avenue, N.W.
Washington, D.C. 20005

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Chronometer adjuster (clock and watch)	715.381-038
Hearing aide repairer	719.381-014
Radio repairer	720.281-010
Tape recorder repairer	720.281-014
Television repairer	720.281-018

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MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
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Helena, Montana 59601

THE JOB: WELDER

A WELDER joins pieces of metal together by placing them next to each other and melting the adjacent surfaces causing them to intermix and form a fusion. A combination welder uses both of two welding categories: arc and gas.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Emotionally stable	Mechanical	Good eye-hand coordination
Accurate	Spatial	Manual dexterity
Patient		Good eyesight
Initiative		Physical stamina
Imagination		Steady hand

YOU SHOULD KNOW THAT

- -You will weld with both gas and arc machines in horizontal, vertical, and overhead positions;
- -Read blueprints and layout;
- -Lift, stoop for long periods of time, and climb;
- -Work under all conditions such as extreme heat, extreme cold, and above average noise.

YOU MUST BE ABLE TO

- -Pass a welding test or obtain a welding certificate;
- -You will be working with all kinds of hazards such as electrical shock, explosion, inhalation of smoke and fumes, eyestrain and burns;
- -Welding demands above average physical stamina and condition;
- -You should have good balance as structure welding jobs are often performed in high places.

D.O.T. 819.384-010

PREPARATION AND TRAINING:

High school graduation is required. College training or welding experience is demanded by many employers. Pre-requisites depend greatly on the place of employment and the type of welder needed.

RECOMMENDED HIGH SCHOOL SUBJECTS:

- Metal Shop
- Electricity
- General Shop
- Auto Mechanics
- Drafting
- Blueprint Reading
- Mechanical Drawing
- Shop Math
- Physics

Training is available through apprenticeship programs which are usually three years of on-the-job training covering ornamental work, reinforcing work, structuring work, rigging work, and acetylene work. Related school instruction is also provided.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

Welders are emloyed in federal and state construction projects, shipyards, and areas of manufacturing, industry, mining, transportation, wholesale and retail trade, and miscellaneous business services.

ADVANCEMENT

The welder with additional training and experience can be promoted to: inspector, layout worker, estimator, foreman.

Opportunities for advancement, however, are somewhat limited.

Promotions depend largely on keeping abreast of new techniques and obtaining further training.

Lack of proper certification can be a handicap.

MORE ABOUT THE JOB:

The welder's job is one of the most important in our economy today. Welders serve as master menders and also fasten together such things as the ribs of skyscrapers, the steel plates of battleships, and the boilers of locomotives. In fact, there is a need for welders in all industries where metals are used.

Duties of the welder include:

-Welds metal parts together as specified;
-Does layout work using diagrams, work orders, and oral instructions;
-Uses electric arc welding equipment;
-Adjusts amporage control knobs to desired levels;
-Inserts electrode into portable holder;
-Connects cables from welding unit to work piece to obtain desired polarity;
-Strikes arc which generates heat to melt and deposit metal from electrode to work piece;
-Checks electrical connections in ventilation;
-Uses gas torches and adjusts flame to get proper mixture of gases;
-Cuts metal with oxyacetylene torch;
-Bonds metal by brazing and/or soldering;
-May repair broken or cracked parts;
-Fill holes and increase size of metal parts;
-Positions and clamps together components of facticated metal products preparatory to welding;
-Cleans grease or erosion from workpiece.

JOB CLUSTER #4
"Construction"

SALARY INFORMATION

Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
40	$7.00-$12.00/hr	$9.00/hr	$7.00/hr

The wage scale may vary throughout the state. Check with your local union or other source for information pertinent to your area.

HOURS OF WORK

The forty-hour workweek is standard for some jobs, but welders often are on swing shifts and graveyard shifts. A seven-day week, several days off in between weeks, and a four day weekend once a month is common.

FRINGE BENEFITS

Depending on length and place of employment, you may receive:

paid vacation	health insurance
paid holidays	sick leave
retirement program	credit benefits

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LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

The American Welding Society
2501 NW 7th St.
Miami, Fla. 33125

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Brazer, assembler (welding)	819.384-010
Solderer (barrel ribs)	736.684-038
Solderer (dipper)	813.684-018
Template maker	601.381-038
Welder-Assembler, production line (struc., ornam., metalwork)	819.381-010

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MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

THE JOB: WRITER, TECHNICAL PUBLICATIONS

The TECHNICAL WRITER works for a newspaper, magazine, radio or TV station, governmental agency, trade publication, agricultural or industrial organization or firm. The TECHNICAL WRITER develops, writes and edits news releases, reports, manuals, and related technical and administrative publications concerned with work methods, knowledges related to particular fields or areas of specific fields. The WRITER gathers facts by investigating, interview or observation and organizes the facts before writing the articles.

REQUIREMENTS AND QUALIFICATIONS:

Personal Traits	Aptitudes	Physical Abilities
Accurate	Verbal	Good general health
Ability to work well with people	Clerical	Average eyesight
Ability to work under pressure	Finger dexterity	(natural or corrected)

YOU SHOULD KNOW THAT

- -Overtime work is quite common and hours may be irregular;
- -Your training should be in both journalism and the field for which you write;
- -You will be required to attend evening meetings and sometimes work on the weekend or at night to meet a deadline.

YOU MUST BE ABLE TO

- -Drive a car and have a valid Montana driver's license;
- -Show some skill at typing or learn to use a typewriter;
- -Work under pressure and meet deadlines, especially if you work on a publication or media;
- -Summarize briefly and accurately the many facts of a particular story.

D.O.T. 131.267-026

PREPARATION AND TRAINING:

Emphasis should be placed on both journalism and industrial or agricultural field and any experience in either area will be extremely helpful.

HIGH SCHOOL COURSES MIGHT INCLUDE:

English	newspaper production	typing	agriculture/industry
history	printing	speech	photography

COURSE AFTER HIGH SCHOOL:

journalism	social sciences	photography
economics	radio and television	agricultural sciences
political science	broadcasting	industrial sciences

ADDITIONAL FACTS ABOUT TRAINING:

Extensive experience in general journalism is helpful and might lead to more rapid employment and advancement. You will receive some on-the-job training upon employment, but you will be expected to already know the basic skills.

PROSPECTS AND OPPORTUNITIES:

JOB OPPORTUNITY TRENDS

There are openings for trained technical writers.

Opportunities are good for both men and women.

Opportunities are best in agricultural areas on all media outlets and with industrial/agricultural organizations; trade publications; governmental agencies; and large media outlets.

If you are employed in a smaller organization you will probably be required to perform general writing assignments.

ADVANCEMENT

With experience, the technical writer can become:

- -An industrial or agricultural editor;
- -Newspaper or magazine agricultural/industrial editor;
- -Special reporter on radio or television;
- -Agricultural/industrial organizations executive
- -Governmental agency executive.

MORE ABOUT THE JOB:

The technical writer:

- -May be employed by a newspaper, magazine, radio or television station or governmental agency, agricultural/industrial organization or trade publication;
- -If employed by a small paper, magazine or station, may also perform duties not related to agriculture/industry;
- -Must have knowledge and training in journalism and agriculture or specific industry;
- -Will receive some on-the-job training, but is expected to have mastered basic and intermediate skills before applying for employment;
- -Determines story possibilities through tips, suggestions from editors and research;
- -Collects information for stories through telephone interviews, background reading, research, observation and interviewing in the field;
- -Organizes information, summarizing the facts accurately and completely;
- -Checks facts for accuracy;
- -Can write articles or tape broadcasts;
- -Does follow-up articles when required;
- -Arranges for or takes photographs to go with story;
- -May maintain records and files of work and revisions; select photographs, drawings, sketches, diagrams, and charts to illustrate material;
- -May assist in laying out material for publication, arrange for typing, duplication, and distribution of material;
- -May write speeches, articles and public releases;
- -May edit, standardize, or change material prepared by other writers.

JOB CLUSTER #3
"Communications and Media"

SALARY INFORMATION	Hours Weekly	Salary Range	Most Workers Earned	Usual Starting Salary
	40	$11,500-$23,400/yr	$15,000/yr	$11,500/yr

Salaries vary throughout the state. Check a local source of information in your area.

HOURS OF WORK

Although a forty-hour week is standard, agricultural journalists might work up to sixty hours per week. Overtime is paid either in compensating time off or at the rate of time and one-half. Normal workdays vary widely. Most agricultural journalists work a five-day week.

FRINGE BENEFITS

Depending on the length and place of employment, you may receive:

paid overtime	health insurance	pension plan
sick leave	life insurance	profit sharing
paid holidays	expense account	paid vacation

LOCAL SOURCES OF INFORMATION:

The Employment Service helps many young people find jobs
You may contact a youth representative at your local Employment Service Office

Contact your local medica agricultural/industrial organization for further information.

ADDITIONAL SOURCES OF INFORMATION:

Your school counselor and librarian may also help you find additional information

The Newspaper Fund, Inc.
Post Office Box 300
Princeton, New Jersey 08540

American Newspaper Publishers Association
70050 Third Avenue
New York, New York 10017

School of Journalism
University of Montana
Missoula, Montana 59812

RELATED OCCUPATIONS:

JOB TITLE	D.O.T. #
Reporter	131.267-018
Correspondent	131.267-018
Newswriter	131.267-014
Copy Writer	131.067-014
Public Relations	165.067-010
Public Information Positions	165.067-010
Association Executive Secretary	189.017-010
Editor, Technical & Scientific Publications	132.017-018
Editor, Publications	132.037-022

MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
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BILLINGS VOCATIONAL-TECHNICAL CENTER

The BILLINGS VOCATIONAL-TECHNICAL CENTER, located in Billings, Montana is dedicated to providing quality education and training to meet the needs of today's job demands.

PROGRAMS

The curriculum is designed to provide the fundamental education so the student may secure training in his chosen field. Below is a list of course offerings:

- Agricultural Mechanics
- Agricultural Production
- Nurse Assistant (Aide)
- Practical Nursing
- Mid-Management
- Food Services
- Accounting/Bookkeeping
- Secretarial
- Air Conditioning and Refrigeration
- Auto Body Repair
- Auto Mechanics
- Combination Welding
- Diesel (Engine) Mechanics
- Drafting

STUDENT SERVICES

Complete vocational guidance services are available in the Center's registration office. These services are available to the prospective student as well as to those currently enrolled.

Other services offered are admission, registration and records, loans and scholarships, and placement services.

STUDENT ACTIVITIES

The Center has an active Student Council. Intramural sports are available for those who are interested.

HOUSING

The Center has no provisions for housing. The students must make arrangements for their own room and board. The Center will do all that is possible to assist in location of housing. Many students live at the Eastern Montana College dormitory while attending the Vocational Technical Center.

COSTS

Based on 1979-80 school year:

Tuition: In-state. . . . . .$ 80/quarter
Out-of-state. $300/quarter
Books and Supplies (variable) $100-300/year

FINANCIAL ASSISTANCE

Veterans may apply for the G.I. Bill or War Orphan Training.

Vocational Rehabilitation and other agencies assist students who qualify.

Students interested in financial aid should check with the office.

ADMISSION PROCEDURES

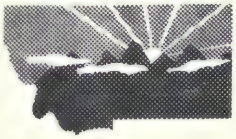
The applicant must be sixteen years of age or older.

Complete and return an application form.

High school transcripts, G.E.D. results, aptitude test results, and a personal interview may be requested; however, they are not mandatory for admission.

ADDRESS INQUIRIES TO:

Billings Vocational-Technical Center
3803 Central Avenue
Billings, Montana 59102



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BUTTE VOCATIONAL-TECHNICAL CENTER

The BUTTE VOCATIONAL-TECHNICAL CENTER located in Butte, Montana, has as its basic function that of providing quality education and training to meet the job requirements of today in industry, business, professional and public service.

PROGRAMS

The curriculum is designed to meet the needs of employers in the ever changing world of work. Below are listed the courses offered at the Center:

- Automotive Mechanics Technology
- Bookkeeper-Accountant
- Civil Engineering Technology
- Clerk-Typist
- Drafting Technology
- Electrical Technology
- Machine-Tool Operation Technology
- Nurse, Practical
- Secretary-Stenographer
- Small Engine and Equipment Mechanic
- Welding Technology
- Medical Secretary
- Legal Secretary
- Data Entry Operator

STUDENT SERVICES

A guidance program functions to enable each student to obtain the utmost from the school program.

The Center cooperates closely with management, labor and the Montana Employment Security Division to assist students in job placement. A placement officer at the Center helps each student in getting a job.

Admission, counseling, registration, records, financial aid, and scholarships are other services offered students.

STUDENT ACTIVITIES

The Butte Vocational-Technical Center has a student trades and professional council through which student representatives of each program may institute and coordinate activities throughout the year. The Council meets on a regular basis.

HOUSING

The Butte Vo-Tech Center is not equipped with dormitories or married housing. The Center does advertise for housing and will issue a list of rental facilities to those who request it.

The Center has a cooperative housing arrangement with Montana Tech whereby students may obtain room and board in the Montana Tech co-ed dormitory. The counselors will assist students in making the arrangements at Montana Tech providing space is available.

COSTS

Based on 1979-80 school year:

Tuition: In-state. . . . . $ 80/quarter
Out-of-state. $300/quarter
Books & Supplies (variable) . . . . . $100 - $300/yr.

FINANCIAL ASSISTANCE

The Center has a financial aid officer who assists students with financial needs.

The school participates in the College Work-Study program, Basic Educational Opportunity Grants and Supplemental Opportunity Grants.

Veterans may apply for the G. I. Bill or War Orphan Training benefits.

Vocational Rehabilitation, Employment Service, Visual Services, Welfare Department, and other agencies assist students who qualify for any of their programs.

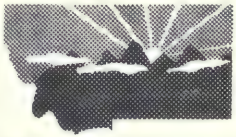
ADMISSION PROCEDURES

All Montana residents, sixteen or older, may attend.

Educational pre-requisites vary with courses. All candidates will be accepted on a first come, first served basis. Students with deficiencies will be given refresher courses to meet entry level skills. Applications will be taken throughout the year and students may enter most courses at any time, provided space in the class is available.

ADDRESS INQUIRIES TO:

Butte Vocational-Technical Center
404 South Wyoming
Butte, Montana 59701



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GREAT FALLS VOCATIONAL-TECHNICAL CENTER

The GREAT FALLS VOCATIONAL-TECHNICAL CENTER, located in Great Falls, Montana, has as its primary function providing vocational and technical education for youth and adults.

PROGRAMS

The curriculum is designed to prepare the student to meet the employment requirements of business, industry and trades in a rapidly changing technological world. Graduates will receive a certificate of completion. Below are the programs offered:

HEALTH
- Dental Assistant
- Nurse Assistant (Aide)
- Practical Nursing

OFFICE
- Accounting/Bookkeeping
- Keypunch Operator (Data Entry)
- Automatic Typewriter
- Clerk, General Office
- Clerk/Typist
- File Clerk
- Legal Secretary
- Medical Secretary
- Secretary/Stenographer

TRADES & INDUSTRY
- Auto Body Repair
- Multi-Occupations
- Watchmaking and Jewelry Repair

STUDENT SERVICES

A full-time Vocational Guidance Counselor is available to assist students at all times.

Other services provided are admission, registration and records, loans and scholarships, and placement service.

STUDENT ACTIVITIES

HOUSING

Since Great Falls Vo-Tech Center has no dormitories, all students are expected to make their own arrangements for board and room. However, the school does assist when possible in this matter.

COSTS

Based on 1979-80 school year:

Tuition: In-state. . . . . .$ 80/quarter
Out-of-state. $300/quarter
Books and Supplies (variable) . . . . . .$100 - 300/quarter

FINANCIAL ASSISTANCE

Loans are available under the Federally Insured Loans.

Veterans may apply for the G.I. Bill and War Orphan Training.

Referral Agencies as Vocational Rehabilitation Division, Employment Services and Welfare Department has help for students who qualify.

Part-time employment to help meet expenses is sometimes available. The center participates in the college and vocational work study programs.

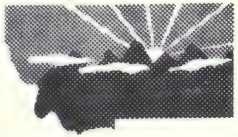
ADMISSION PROCEDURES

Requirements:

1. Minimum age of 16 years;
2. Completion and return of application form;
3. When possible, have a personal interview with the Great Falls Vo-Tech Counselor.

ADDRESS INQUIRIES TO:

Great Falls Vo-Tech Center
2100 - 16th Ave. So.
Great Falls, Montana 59405



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HELENA VOCATIONAL-TECHNICAL CENTER

The HELENA VOCATIONAL-TECHNICAL CENTER is a technical center dedicated to personal growth and skill development enabling each individual to make a positive contribution in the community. The greatest single concern of the center is to present the highest quality educational program possible within the limits of space, personnel and finances.

PROGRAMS

The curriculum is designed to provide the basic training for securing employment. Graduates will receive a certificate which specifies the type of occupational training received. Below is a list of the courses offered:

- Agri-Mechanics
- Aircraft Mechanics
- Auto Mechanics
- Building Trades
- Business Data Process
- Data Entry (Keypunch)
- Diesel Mechanics
- Executive Secretary
- General Business Accounting
- General Office Specialist
- Industrial Electronics Technician
- Keypunch (Data Entry)
- Legal Secretary
- Machinist
- Medical Secretary
- Nurse - Practical
- Private Secretary
- Radio-TV Technician
- Truck-Coach
- Mechanic
- Truck Driving
- Welding

STUDENT SERVICES

Counseling is available to assist all students with academic, vocational and personal concerns. The counselors at each campus provide a service for all students who are concerned with their growth and development in realizing their potential.

Student assistance for life and career planning may be provided on a one-to-one relationship or in a group setting.

STUDENT ACTIVITIES

The Student Senate is composed of a student elected from each department in the fall. Officers of the Senate are elected from the Senate membership. The officers also participate in the United Senate for Vocational Education meetings which promotes vocational education in Montana.

The Senate is responsible for the social activities that are held throughout the year. Activities include picnics, dances and student contests. Profits realized from these activities and from the student lounge are deposited in the student activities fund and used for the promotion of future projects.

Meetings are the first and third Thursday of every month.

The intramural sports program provides an opportunity for men and women to participate in activities of their interest. The program is organized by the Student Senate and includes such activities as basketball, volleyball, and skiing. Students participate in these activities at their own risk.

HOUSING

All students are expected to make their own arrangements for room and board. The Center does assist in this matter and usually has a list of rooms in private homes and apartments which may be rented.

Apartment rentals in Helena start at approximately $125 per bedroom.

COSTS

Based on 1979-80 school year:

Tuition: In-state. . . . . .$ 80/quarter
Out-of-state. $300/quarter
Books and Supplies (variable) . . . . . .$100 - $300/year

FINANCIAL ASSISTANCE

Financial aid is available to students that qualify based upon their financial need. The Center uses the A.C.T. or C.S.S. to determine need. Forms are available from high school counselors or the Financial Aid Office at the Helena Center.

Major sources of financial aid are available at the Center.

VETERANS may be eligible for educational benefits. Veterans should complete the application form and return it to the Center with a copy of their DD214 and a copy of their marriage license and children's birth certificates.

OTHER AGENCIES may sponsor a student who qualifies for training. These agencies may be the Social and Rehabilitation Services, Bureau of Indian Affairs, Social Security, Employment Security Commission and the Welfare Department.

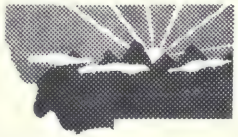
Many part-time jobs are available in the community to students who do not qualify for the above programs and wish to work.

ADMISSION PROCEDURES

-Admission: Application forms are available at the Helena Vocational-Technical Center and at all High schools in the state.
-Regular Applicant: A regular applicant is a Montana resident possessing a high school diploma or its equivalent.
-Special Applicant: Montana residents 16 years of age or older not possessing a high school diploma or its equivalent are considered for acceptance as a special student.
-Applications are considered on a first-come, first-served basis. Residents of Montana are given priority in filling all classes. All applicants are considered regardless of race, creed or sex.
-A copy of each student's final high school transcript is requested.
-A student is considered for acceptance into a program when (1) a completed application is received in the Admission's Office with (2) a $10 non-refundable application fee. The date the completed application is received is the basis for acceptance into the program.
-Notification of acceptance or student's rank on the waiting list is made within two weeks upon receipt of the completed application.

ADDRESS INQUIRIES TO:

Helena Vo-Tech Center
1115 Roberts
Helena, Montana 59601



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MISSOULA VOCATIONAL-TECHNICAL CENTER

The MISSOULA VOCATIONAL-TECHNICAL CENTER located in Missoula, Montana, is comprised of five buildings located at two separate sites on South Avenue. Fully modern classrooms, laboratory areas, and shop areas are designed, and equipped to simulate enviorments found in the world of work. Comfortable student lounges are located in most of the buildings. In addition, a snack bar is in the main lounge.

PROGRAMS

The Center's vocational-technical post-secondary program is designed to serve youth and adults sixteen years of age or older, regardless of educational background or occupational experience. In addition to vocational-technical or occupational education, continuing adult education and community service courses are also offered.

Because jobs and the demands for trainees change continuously, the curriculum is in a constant state of change. Below is a list of programs offered at this time:

AGRICULTURE
- Forestry Technician

DISTRIBUTIVE
- Mid-Management
  - (Options)
  - Fashion Merchandising
  - Marketing Management
  - Retailing

HEALTH
- Operating Room Technician
- Practical Nursing
- Respiratory Therapy Technician

HOME ECONOMICS - OCCUPATIONAL PREPARATION
- Food Service
  - (Options)
  - Dinner/First Cook
  - Fast Foods
  - Fry Cook
  - Pantry/Salad Foods

OFFICE
- Accounting/Bookkeeping
- Business Data Processing
  - (Options)
  - Computer Operator
  - Keypunch Operator (Data Entry)
  - Programmer
- Educational Assistant
- Secretarial
  - (Options)
  - Clerk Typist
  - Legal Typist
  - General Secretary
  - Legal Secretary
  - Medical Secretary
  - Medical Secretary Receptionist
  - Medical Secretary Transcriptionist
  - Stenographer

TECHNICAL
- Electromechanical Technology
  - (Options)
  - Industrial Electronics
  - Industrial Electronics Communications

TRADES AND INDUSTRY
- Combination Welding
- Heavy Equipment Maintenance
- Small Engine Repair

STUDENT SERVICES

Educational, vocational-technical and personal counseling is available at the Center. Counselors are on duty daily throughout the year.

Other services provided include admissions, registration and records, financial aid, and placement.

STUDENT ACTIVITIES

All enrollees in the Missoula Vocational Technical Center, regardless of course of training being pursued, are encouraged to belong to and participate in the Associated Students.

HOUSING

The Missoula Vocational Technical Center does not assume the responsibility for housing students who live away from home. Information regarding rental units is posted in the Admissions Office.

COSTS

Based on 1979-80 school year:

Tuition: In-state. . . . . .$ 80/quarter
Out-of-state. $300/quarter
Books and Supplies (variable) . . . . . .$100-$300/year

FINANCIAL ASSISTANCE

When money is accessible, a federally-assisted student loan program is available to students demonstrating a likelihood of success within the training program.

Students eligible for special assistance from the Veterans Administration or the Division of Vocational Rehabilitation may obtain information through the Financial Aid Officer.

The Center participates in the College Work Study program and Basic Educational Opportunity Grants.

ADMISSION PROCEDURES

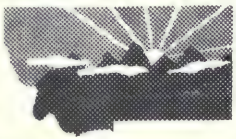
The applicant must be 16 years of age or older.

The Applicant should complete and return the application form.

Applicants to the Practical Nursing and Respiratory Therapy Technician programs must show proof of high school graduation or equivalent upon acceptance.

ADDRESS INQUIRIES TO:

Missoula Vocational Technical Center
909 South Avenue West
Missoula, Montana 59801



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CARROLL COLLEGE

CARROLL COLLEGE, Helena, Montana, emphasizes high quality career-directed educational programs on a strong liberal arts base to help students develop learning skills and life value systems. Carroll is a Catholic college attended by students of all faiths.

PROGRAMS

The curriculum is divided into four major divisions, with majors and special programs as listed below. (Please note: Majors are not offered in the areas marked with an asterick-*). The B.A. is awarded upon completion of four years.

Division of Arts and Humanities
- *Art
- Communication Arts
  - Speech-Communications
  - Theatre Arts
  - Speech Science
- English
- Foreign Language
  - Classical
  - Modern (French and Spanish)
- *Music
- Philosophy
- Theology
- Religious Education

Division of Health Sciences
- Dental Hygiene
- Medical Technology
- Medical Record Administration
- Nursing

Division of Natural Science & Mathematics
- Biology
- *Chemistry
- Engineering (3-2 program)
- Mathematics
- *Physics
- *Pre-Professional
  - Dentistry, Osteopathy
  - Medicine, Pharmacy
  - Optometry, Veterinary Medicine

Division of Social Sciences and Education
- Accounting
- Economics
- Education
  - Elementary
  - Secondary
  - *Special
- Finance
- General Business
- History
- Physical Education, K-12
- Political Science
- Psychology
- Sociology
- Social Work

Associate Degrees (Two Year)
- Accounting
- Art
- Chemistry
- Communication Arts
- English
- Human Services
- Paraprofessional Education
- Mathematics

*Special Programs
- Advanced Placement
- Cooperative Education
- Foreign Study
- Pre-Seminary Program
- Native American Studies
- Practicums & Internships

STUDENT SERVICES

A wide range of special services are available to students at Carroll College, including full-time professionally staffed offices for financial aids, job placement, testing, counseling, cooperative education, student affairs, and health services. The Director of Placement and Cooperative Education assists students in career selection, preparing for and obtaining employment interviews and job placements on either a part-time or full-time basis. The Academic Dean and the Department Chairmen assist students in obtaining graduate and professional school admission and support and job and teacher placement. Faculty members are chosen for their teaching ability and their interest in student counseling.

STUDENT ACTIVITIES

Carroll is a collegial community. Developing maturity and civic responsibility in the persons who comprise this community is a key goal. The offices of the Dean of Students and the Associated Students of Carroll coordinate the extra-curricular well-being and development of students and student groups. Inter-collegiate and intra-mural schedules are maintained in football, basketball, swimming, skiing, volleyball, bowling, handball, and other minor sports. The Physical Education Center provides opportunities for indoor tennis, volleyball, basketball, weight lifting, and other health and recreational activities. Mountains and lakes of the Helena valley provide ample spaces for fishing, hunting, camping, boating, snow and water skiing. The activities schedule also includes excellent programs in dramatics, forensics, publications, specialized clubs, a variety of seminars, dialogues and visiting scholar lectures, and participation in student government and in the administration of the college.

HOUSING

65% of Carroll's full-time students reside on campus. The resident facilities include reading lounges, laundry rooms, and chapels in each hall. Double room accommodations and a limited number of single rooms are available. At Carroll, residence halls are not just places to live but to learn. Individual halls determine goals, programs, and styles with the assistance of the Dean of Students Office.

WOMEN'S RESIDENCES
- Guadalupe Hall - cap. 342
- St. Charles Hall - cap. 50
- St. Alberts Hall - cap. 16

MEN'S RESIDENCES
- St. Charles Hall - cap. 200
- Borromeo Hall - cap. 64

COSTS

Because Carroll College is a private college, the primary source of revenue to maintain quality of instructional programs and facilities is derived from student tuition, supplemented by gifts and grants from alumni, business firms and foundations and by endowment income. The charges for the 78-79 academic year include:

Tuition and General Fees	$975.00 per semester
Books and Supplies	$ 75.00 per semester
Board and Room	$705.00 per semester

FINANCIAL ASSISTANCE

Carroll College dispenses approximately $1,000,000 annually in student financial aid to help students and their families meet their educational expenses. Fifty-three percent of the student body received financial aid in 1978-79 in the average amount of $1,700.

Types of assistance include scholarships, annual cash awards, basic opportunity grants, educational opportunity grants, national direct student loans, federally insured loans, family allowances and campus employment.

For further information, write the Director of Financial Aid.

ADMISSION PROCEDURES

1. Complete and return application form accompanied by $20 application fee.

2. Send an official high school transcript to the Director of Admissions.

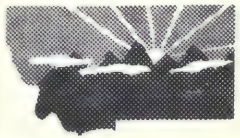
3. Have scores from either the ACT (American College Test) or the SAT (Scholastic Aptitude Test) sent directly to Carroll.

All correspondence and inquiries concerning admission should be directed to the Director of Admissions.

ADDRESS INQUIRIES TO:

Director of Admissions
Carroll College
Helena, Montana 59601

Phone: (406) 442-3450, Ext. 286



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COLLEGE OF GREAT FALLS

THE COLLEGE OF GREAT FALLS is an independent Catholic College located in Great Falls, Montana, on a 64-acre campus.

PROGRAMS

The academic program follows five main divisions:

- Liberal Arts and Sciences
- Fine Arts
- Teacher Education
- Business Administration
- Pre-Professional Programs

CGF also has inaugurated two-year associate degrees in twelve fields and has a large continuing education program on campus, at Malmstrom AFB, and in three Montana towns.

STUDENT SERVICES

The College offers to the student a wide variety of special services including counseling and testing, student activities, admission, registration and records, health service, placement service, loans and scholarships.

STUDENT ACTIVITIES

Cultural activities on the college campus are many and varied.

Student organizations and active student government at the College of Great Falls offer opportunities for the development of initiative and leadership.

HOUSING

The College of Great Falls provides apartments for upperclassmen and women and a dormitory for freshmen and sophomores. Both are coeducational. All single out-of-town students under age 21 are required to live on campus.

COSTS

Based on the 1978-79 school year:
The College of Great Falls is a private institution not drawing income from taxes or other public funds. The tuition which the student pays is the primary source of revenue needed to maintain proper standards of instruction and equipment.

Tuition: $960 per semester or $65 per credit
Fees: $18 per semester
Room and Board: $595 per semester
Books and Supplies: $50 per semester

FINANCIAL ASSISTANCE

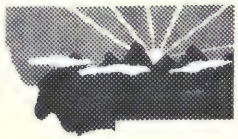
The College maintains a complete program of financial assistance. The scholarship program is administered by the Director of Admissions and the Registrar as they are permanent members of the Scholarship Committee. All other types of financial assistance are applied for through the Financial Aid Office. Assistance includes National Defense and Direct Student Loans, Educational Opportunity Grants, College Work-Study Program, Federally Insured Student Loans, and a Family Plan.

ADMISSION PROCEDURES

1. Complete the application blank and return it with the application and registration fee of $20 to the Admissions Office, College of Great Falls. (Fee is not refundable)
2. Request high school principal to send high school transcript to the Admissions Office of the College of Great Falls.
3. Have physical examination report completed and returned to the Admissions Office of the College of Great Falls.
4. Preference will be given to applicants who have completed a minimum of four years of English, two years of foreign or classical language, two years of mathematics (algebra and geometry recommended), one year of laboratory science, and one unit each of American and world history and who rank in the upper one-half of their high school graduating class.

ADDRESS INQUIRIES TO:

Office of the Registrar
College of Great Falls
1301 20th Street South
Great Falls, Montana 59405



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DAWSON COLLEGE

DAWSON COLLEGE in located in Glendive, Montana a city of approximately 10,000. The School offers the first two years of college work.

PROGRAMS

The college offers an educational program to all post high school citizenry, whether it be for college work, continuing adult education or vocational-technical training. Graduates receive either an Associate Degree, an Associate Vocational-Technical Degree, or a 1-year Vocational-Technical Certificate, depending on the program. The programs offered at Dawson are listed below:

- Agribusiness Technology
  - 1-year Livestock Technology Certificate
- Biological Science
- Business
  - Secretarial Science
  - Legal Stenographer Option
  - Medical Stenographer Option
  - Veterinary Office Assistant Option
  - 1-year Clerk-Typist Certificate
  - 1-year Secretarial Certificate
  - Business Administration
  - Mid-Management
- Land Surveying Technology
- Education
- Humanities
  - English (Literature)
  - English (Writing)
  - Foreign Languages
  - Journalism
  - Speech
    - Communication
    - Dramatics
    - Pathology and Audiology
- Human Services
  - 2-year Associate Applied Science Degree
- Law Enforcement
- Liberal Arts
- Social Science
  - Anthropology
  - History
  - Political Science
  - Psychology
  - Sociology

- Pre-Agriculture or Pre-Forestry
- Pre-Engineering
- Pre-Home Economics
- Pre-Industrial Arts
- Pre-Medical Sciences
- Pre-Nursing

STUDENT SERVICES

Dawson College offers a Learning Skills program which provides remedial and other special services for students with academic potential who are enrolled at the college and who by reason of deprived educational, cultural or economic background, or physical handicap, are in need of such services to assist them to initiate, continue or resume their postsecondary education. Special remedial equipment is available for these students.

Testing services include the General Educational Development Test (High School Equivalency); the CLEP test (College Level Examination Program); and ACT (The American College Testing Program).

Other services offered the student are student activities; admission, registration and records; loans and scholarships.

STUDENT ACTIVITIES

There are various student organizations, a student government, newspaper and yearbook. Dawson College also has a variety of social activities and assists in sponsoring community concerts.

Student organizations include:

- Associated Women Students
- Civil Tech Club
- DECA (Distributive Education)
- Dawson College Indian Club
- Dramatics Club
- Intervarsity Christian Fellowship
- Kappa Alpha (Law Enforcement)
- Lettermens Club
- Newman Club
- Rodeo Club
- Veterans Club

HOUSING

A residence hall for 30 men has been in operation since the fall of 1970. Dormitory residents are served lunch and an evening meal and have kitchen privileges for preparation of breakfast. Dormitory brochures and applications are available through the Office of the Student Affairs Director at Dawson College.

Other housing arrangements can be made in private homes near the college or throughout the city. The college office maintains a list of housing that is available for students and assists them in every way possible to obtain satisfactory housing.

COSTS

Tuition:	Full time - per quarter	Part time - per credit
	District resident.....$ 50.00	District resident.....$ 8.00
	Out-of-district resident. 100.00	Out-of-district resident... 10.00
	Out-of-state resident.... 200.00	Out-of-state resident..... 20.00

Books and Supplies.....$ 50.00 per quarter
General Fee..... 20.00 per quarter

FINANCIAL ASSISTANCE

The college operates a Financial Aid and Placement Service. Special scholarships are awarded by the college service organizations, businesses and the private citizens in Glendive.

Dawson College also administers a program of government financial aid for those students who can demonstrate a financial need to continue their education.

ADMISSION PROCEDURES

A candidate for admission to Dawson College must be a graduate of an accredited high school or possess a High School Equivalency Certificate. For regular admission, the following documents are required:

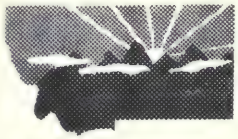
1. Proof of high school graduation (high school transcripts or photo copy of diploma). A high school equivalency certificate issued by a state department of public instruction will be accepted in lieu of regular graduation.

2. Completed application form accompanied by the $10.00 admission fee.

3. American College Test transcript (to be sent directly from ACT).

ADDRESS INQUIRIES TO:

Director of Admissions
Dawson College
Box 421
300 College Drive
Glendive, Montana 59330



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

EASTERN MONTANA COLLEGE

EASTERN MONTANA COLLEGE is located in Billings, Montana. It is one of the units of the Montana University System. The campus is on 72 acres with 12 buildings. The enrollment is approximately 3,500 students. 96% of the students are from Montana with the remaining percent from other states.

PROGRAMS

Eastern is a comprehensive state college offering academic programs in:

1. Elementary Education
2. Secondary Education
3. Special Education
4. Liberal Arts and Science
5. Rehabilitation
6. Graduate

Eastern offers two-year Associate of Arts Degrees, four-year Bachelors Degrees and Master Degree programs.

Major programs are in Art, Biology, Business, Chemistry, Communications, English, German, General Science, History, Mathematics, Music, Psychology, Physics, Social Science, Spanish and Special Education.

Eastern is accredited by the Northwest Association of Secondary and Higher Schools and the National Council for Accreditation of Teacher Education.

STUDENT SERVICES

Services available to all students include:

1. Student Counseling Center
2. General Studies Advising Officer
3. Health Center
4. Special Services
5. Financial Aid Office
6. Placement Office

STUDENT ACTIVITIES

There are activities available on the campus to meet all student needs and interests. To name a few, athletics, intramural activities, out-door recreational activities, lectures, dances, concerts, plays, jazz band, chorus, and thirty-seven clubs of various interests.

Students will be introduced to the activities during a three day Orientation Session held prior to Fall quarter registration.

HOUSING

Eastern Montana College provides living facilities on-campus for single full time students. Students may select from a variety of options.

Eastern has four residence halls for a total capacity of 885 students. For further information and forms contact, Director of Residence Life.

COSTS

Fees:	In State	$ 519 per year
	Out of State	1527 per year
Board and Room:	Approximately	1500 per year
Books and Supplies	Approximately	150 per year

FINANCIAL ASSISTANCE

Students who qualify for financial aid may receive one or more of the following:

1. Federal Basic Educational Opportunity Grant
2. Federal Supplemental Educational Opportunity Grant
3. College Work Study
4. National Direct Student Loan
5. Guaranteed Student Loan
6. Fee Waiver
7. Scholarship

Applications and further information is available from the Director of Financial Aids.

ADMISSION PROCEDURES

1. Submit an application for admissions with $20.00 Admissions Fee.

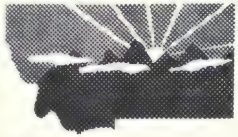
2. Have a high school transcript indicating graduation date and class rank sent to the Office of Admissions after graduation.

3. Have official American College Test (ACT) scores sent to the Counseling Center prior to registration.

After all of the above credentials are received and evaluated, a letter of acceptance will be sent.

ADDRESS INQUIRIES TO:

Office of Admissions
Eastern Montana College
Billings, MT 59101



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Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

FLATHEAD VALLEY COMMUNITY COLLEGE

FLATHEAD VALLEY COMMUNITY COLLEGE is located in Kalispell, Montana. The College has a commitment to offer a variety of education programs for students and adults of varying abilities, interests and occupational objectives.

PROGRAMS

The college offers courses in the following broad areas:

Lower division curriculum for transfer to a four-year university or college.

Occupational education for entry into specific vocations.

Developmental education, for students who are not prepared to pursue college work or occupational programs.

Continuing education for citizens in the community who may desire further preparation in general education, in a vocational field or in an avocational venture.

Students in varying programs can earn an Associate Arts Degree, an Associate in Applied Science, or a Certificate of Completion.

STUDENT SERVICES

Student Guidance Services are a vital part of Flathead Valley Community College. Counselors are available to any student who needs assistance with educational, vocational or personal planning.

The college in cooperation with the Montana State Employment Service, assists college students in locating work in the community.

Other services offered include student activities, admission, registration and records, loans and scholarships.

STUDENT ACTIVITIES

The Flathead Community College program emphasizes social and cultural as well as academic education.

HOUSING

Flathead Valley Community College serves a large number of students in Flathead Valley who commute daily to classes. Those students needing housing and board will be assisted in finding suitable facilities in the immediate area of the college.

COSTS

Based on 1979-80 school year:

Full time:		Part time (per credit hour):	
Resident	$90.00	Resident	$ 9.00
Out-of-district	120.00	Out-of district	12.00
Out-of-state	220.00	Out-of-state	22.00

Any student taking 10 credits or more pays $5.00 student activity fee.

FINANCIAL ASSISTANCE

The College is a member of the Montana Student Financial Aid Association. Students needing financial assistance should complete the Montana Application for Student Financial Aid Form at the time the Application for Admission is submitted.

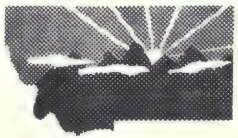
The college will assist students needing loans. Students should contact the Financial Aid Office for necessary information.

ADMISSION PROCEDURES

1. Complete Application for Admission (available from the college or from your high school counselor).
2. Request high school attended to forward a transcript to the college.
3. If ACT test has been taken, request test scores to be forwarded to the college.
4. Each admitted applicant will receive notice of a pre-registration counseling meeting as well as confirmation of his admission.

ADDRESS INQUIRIES TO:

Dean of Students
Flathead Valley Community College
Kalispell, Montana 59901



MONTANA VIEW

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Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

MILES COMMUNITY COLLEGE

MILES COMMUNITY COLLEGE, located in Miles City, Montana, is a rural two-year college. Total enrollment is approximately 600, of which some 350 students are enrolled in the regular daytime academic and vocational programs, with the remainder comprising students enrolled in Evening School and Adult Education programs.

PROGRAMS

The program of instruction at Miles Community College is divided into three general classifications: General Education, Liberal Arts Degree-Parallel and Vocational-Technical (including Business and Secretarial Training). Upon completion of varying programs, students may receive an Associate of Arts Degree, Associate of Applied Science Degree or a Certificate of Completion. Below are listed the general curriculum programs offered:

Pre-Professional	Vocational-Technical
Agriculture	Allied Health
Art	Automobile Mechanic
Business Administration	Electronics Technician
Education, Elementary	Mid-Management
Education, Secondary	Nurse Associate Degree
Education, Special	Secretary, Legal
Engineering	Secretary, Medical
English	Secretarial Science
Fish and Wildlife	
Forestry	
History/Political Science	
Home Economics	
Journalism	
Law	
Math	
Medical Sciences	
Music	
Psychology	
Science	
Social Work	
Sociology	
Speech Communications/Theatre	

STUDENT SERVICES

The college provides a number of services to the student including individual counseling and guidance, financial assistance programs, placement service and the opportunity for students and adults to make up deficiencies for high school graduation or college transfer. The College Level Examination Program (CLEP) testing is also available.

STUDENT ACTIVITIES

The college encourages and supports a well-rounded program of student activities. The activities program, which is continually increasing in both numbers and variety, is largely determined by student interest and participation. A Student Senate is responsible for the development and coordination of all student activities. Many students participate in chorus and drama groups which combine their talents each spring for the production of a modern Broadway Musical. Intercollegiate athletics include basketball, golf and tennis. The recent completion of an all-weather track on campus will make it possible to develop both intercollegiate and intramural programs in track and field.

HOUSING

The college does not operate dormitories. There are many suitable living accommodations for either men or women students in private homes or apartments throughout the city. The college will assist students in locating off-campus housing and strongly recommends that students live in accommodations which have been approved by the college.

COSTS

Books and supplies variable.

Tuition:	Full-time students per quarter:		Part-time students per credit hour:	
	In-District	$ 75.00	In-District	$ 8.00
	Out-of-District	100.00	Out-of-District	10.00
	Out-of-State	200.00	Out-of-State	12.00

FINANCIAL ASSISTANCE

High school graduates making application for admission to the college are eligible to apply for any of the scholarships or financial aid programs listed below. Scholarship application forms may be secured by writing the of Dean of Students.

Edith Brown Trust Fund Scholarship
Elks Lodge Scholarship
Home Demonstration Scholarship
Margarethe Janssen Memorial Scholarship
Ferne H. Kimball Memorial Scholarship
Kiwanis Scholarship
Frank Mathers Scholarship
Miles City Police Protective Association
MCC-CCHS MEA Unit Scholarship
Patran Scholarship
MCC Second Year Tuition Scholarship
Genevieve Petro Memorial Scholarship
Rotary Club Scholarship
Soroptimist Scholarship
Fred W. Woolsey Memorial Scholarship
Board of Trustees Tuition Scholarship
Athletic Scholarship
Guaranteed Bank Loans
Work-Study Programs

ADMISSION PROCEDURES

1. Complete and return an application form.
2. Send an original transcript of high school credits signed by the principal.
3. Standard test scores, such as ACT or SAT should also be sent if they are available.

ADDRESS INQUIRIES TO:

Admissions Director
Miles Community College
Miles City, Montana 59301

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Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

MONTANA COLLEGE OF MINERAL SCIENCE AND TECHNOLOGY

MONTANA COLLEGE OF MINERAL SCIENCE AND TECHNOLOGY (Montana Tech) is one of six institutions comprising the tax-supported Montana University system. Montana Tech concentrates study on mineral engineering and related fields in which Tech graduates are in great demand by industry and government agencies.

PROGRAMS

Montana Tech is one of only a few U. S. colleges that offer a complete spectrum of 4-year undergraduate degrees in the challenging fields of mineral engineering and technology. Bachelor's degrees are also available in allied fields related to mineral/petroleum production and processing: chemistry; mathematics; occupational safety and health; and society and technology, which has three orientations--technical and professional communications, technology and public policy, and human values and technology.

The college offers undergraduate degrees in these career fields:

- Chemistry
- Engineering Science
- Environmental Engineering
- Geological Engineering
- Geophysical Engineering
- Mathematics
- Metallurgical Engineering
- Mineral Processing Engineering
- Mining Engineering
- Petroleum Engineering
- Occupational Safety and Health
- Society & Technology
  - Technical and Professional Communications
  - Technology and Public Policy
  - Human Values and Technology

Graduate degree programs are also available in engineering fields at Montana Tech.

Tech also offers 2-year associate degrees: Associate of Arts; Associate of Science; and Associate of Science/Engineering. In addition, Montana Tech offers course work applicable to a variety of career programs--biology, business administration, economics, foreign languages, forensics, journalism, law physical education, political science, public service, social work, teaching and others. These programs permit one or two years of resident study for initial requirements. Thereafter, the students in these areas transfer with advanced standing to another college or university to complete their professional degrees.

STUDENT SERVICES

The college offers to the student a wide variety of special services including counseling and testing, student activities, admission, registration and records, health services, placement services and loans and scholarships.

STUDENT ACTIVITIES

Certainly, part of the growth college can bring is through outlets to encourage innovative, versatile and flexible personalities. Campus activities at Montana Tech are as varied as students' interests. A variety of groups and organizations will challenge your energies and curiosity.

Campus activities center in Tech's modern attractive Student Union Building. Meeting rooms, game rooms, a dance floor, snack bar and food service facilities, a lounge, the bookstore, the FM radio station and student offices are housed within the all-purpose building.

Forensics, chorus, band and other activities complement the students' total education at Tech. Students also have clubs for mineral enthusiasts, skiers, women students, student wives, international students, chess and contract bridge players, mountaineers, and camera hobbyists.

Dances, convocations, concerts, movies and class activities also enrich the students' off-study hours.

As a state college, Montana Tech is non-sectarian, but religious organizations have been formed and are encouraged.

Student publications play a key role in student affairs at Montana Tech. The college annual, the Magma, and the newspaper, the Technocrat, tell where the action is and reflect the voices of the students.

Intercollegiate and intramural athletics add to the enjoyment of Montana Tech students. Frontier Conference teams compete in football, basketball, track, tennis and golf. Intramural sports include football, basketball, volleyball, ping pong, swimming, handball, and softball.

HOUSING

The Residence Hall is typically the students home away from home. Montana Tech Residence Hall was completely remodeled in 1971 and offers a variety of accommodations. Food service is provided through a newly constructed Student Union Building where Residence Hall students can eat in comfort with classmates that do not live within the Hall. All single male and female students who are not residents of Butte or the immediate vicinity, and who will not reach their 20th birthday by November 1 are required to live in the Residence Hall for the entire academic year or the remainder thereof.

COSTS

Based on the 1978-79 school year:

Fees: In-state	$460.00 per year for 12-18 credit hours
Out-of-state	$1,470.00 per year for 12-18 credit hours
Room and Board:	$1,530.00 (est.)
Books and Supplies	$200.00

FINANCIAL ASSISTANCE

An active financial aid program is available to all students. Scholarships, loans, part-time jobs, grants, fellowships, work-study opportunities and veterans' assistance are available. In addition, several cash awards are presented each year to students who have proven to be academically outstanding. Helpful and informed counselors will advise the student concerning which type of assistance would best suit his needs and qualifications. In addition to the regular scholarship program, the college recently received $160,000 from the federal government for scholarship awards to qualified students. Many $600 continuous scholarships are available to beginning freshmen as part of the Mining and Mineral Resources Research Institute program of the United States.

Applications for scholarships and financial aid must be completed and returned by March 1.

ADMISSION PROCEDURES

Graduates of any Montana high school or academy fully accredited by the State Board of Education, or of any high school or academy in any other state accredited by approved regional education associations, are admitted to regular standing in Montana Tech by returning the appropriate application materials and required $20 fee and by presenting an official certificate of graduation. Out-of-state students must rank in the upper half of their high school graduating class or demonstrate an equivalent ACT or SAT score.

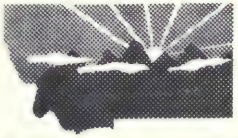
Application forms are furnished by the Montana Tech registrar's Office. Forms should be secured from this office, completed and filed in the Registrar's Office well before the first day of registration for classes.

Freshmen are required to submit to the registrar their ACT (American College Test) or SAT scores. Those who do not take the ACT or SAT before leaving high school must still do so during freshman orientation.

Questions regarding advanced placement, credit through challenge and high school equivalency certificates may be directed to the Montana Tech Registrar's Office.

ADDRESS INQUIRIES TO:

Office of the Registrar
Montana College of Mineral Science and Technology
Butte, Montana 59701



MONTANA VIEW

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Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

NORTHERN MONTANA COLLEGE

NORTHERN MONTANA COLLEGE, the only unit of the Montana University System located in the northern half of the state, is situated on approximately 105 acres in Havre, Montana. NMC offers a valuable service for students who seek a postsecondary education. Within its buildings NMC offers new facilities including well-equipped laboratories, classrooms, shops, offices, recreational, residential and student service buildings.

PROGRAMS

Northern Montana College, unique for its three-fold speciality of technology, education and liberal arts and sciences, affords the opportunity to test vocational interests and scholarly strength in a wide range of fields under the most favorable conditions.

Northern offers degrees in Agriculture and Mechanical Technology, Business and Secretarial Technology, Electronics and Drafting Technology, Elementary and Secondary Education, Health and Physical Education, Health Related Studies (Associate Degree Nursing and Licensed Practical Nursing), History and Social Sciences, Languages and Literature, Mathematics, Sciences, Vocational and Industrial-Technical Teacher Education and Pre-Professional (Law, Medicine, Business, Engineering, Agriculture).

STUDENT SERVICES

Northern is a small enough institution to give students individual attention, yet large enough to offer quality education by highly trained faculty members. The college offers students a variety of special services to help the student analyze his or her own aptitudes, abilities, and interests. These include counseling on admission, registration, placement, student health insurance, and financial aid.

There is an organized student activities program which includes intramural and competitive sports and an outdoor activities schedule.

Northern also has a Learning Center which provides tutors for students and special help on how to study, take notes, prepare for tests, and take tests.

In an effort to assist students through their college years, counselors at Northern focus on student concerns, be they personal, academic or vocational.

STUDENT ACTIVITIES

In order to meet the varied interests of a diversified student body, many special interest clubs are available at Northern. Through these activities students have an opportunity to socialize and form a well-rounded campus life through extra-curricular intercollegiate, intramural, honorary, social, service, and religious organizations.

HOUSING

Housing in the college residence halls provide a physical setting for a program of out-of-class education which contributes to the total development of the student. Modern study lounges and recreational areas add to the "homelike" atmosphere of dorm living.

There are five family apartment buildings, including some fifty apartments which provide comfortable living for married students and their families.

COSTS

Fees:	In-State. . . . . .$	159.00 per quarter
	Out-of-State.	495.00 per quarter
	Room and Board.	500.00 average per quarter
	Books and Supplies. . . .	60.00-75.00 per quarter (estimated)

FINANCIAL ASSISTANCE

Student financial assistance at Northern Montana College is available in the form of loans, scholarships, fee waivers, grants and work opportunities or any combination of the above.

Financial assistance is based on academic ability and financial need. To apply for aid, students must complete an application for Financial Aid and the Basic Educational Opportunity Grant. This form can be obtained from your local high school or at Northern Montana College.

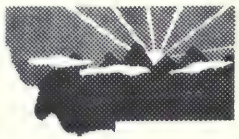
ADMISSION PROCEDURES

The following are steps for admission to Northern Montana College:

1. The applicant should return a completed application form to the Registrar with a $20 non-refundable application fee.
2. The student should have the school counselor send an official copy of the student's complete high school grade transcript (after graduation) to the Northern Montana College Registrar.
3. All applicants must take the ACT battery of tests and have results sent to NMC.
4. A physical examination is required after the student has been accepted.

ADDRESS INQUIRIES TO:

Registrar
Northern Montana College
Havre, Montana 59501



MONTANA VIEW

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Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

ROCKY MOUNTAIN COLLEGE

ROCKY MOUNTAIN COLLEGE, located in Billings, Montana, traces its history back to 1878 as Montana's oldest college. The students come from all over the United States; from varied ethnic backgrounds (6% from minority groups); and from all age groups and economic strata. They come because they want an excellent liberal arts education, and they believe that a small college is the place to find it.

PROGRAMS

Course offerings and programs of study are listed below in general headings:

Division of Fine Arts
Art, Music

Division of Language Arts
English, Speech and Drama, Spanish

Division of Humanities
Philosophy, History, Christian Thought

Division of Professional Education
Education, Physical Education, Recreation and Health

Division of Behavioral Sciences
Business Administration, Economics, Political Science, Psychology, Sociology and Anthropology

Division of Natural Science & Mathematics
Biology, Chemistry, Geology, Mathematics, Physics

STUDENT SERVICES

The student is offered a variety of services including health service, placement service, counseling and testing, tutoring, student activities, intramurals, housing, part-time employment, loans and scholarships, admission, registration, and records.

STUDENT ACTIVITIES

The student organizations and student government at Rocky Mountain College offer opportunities for the development of initiative and leadership. Activities include: Intercollegiate Athletics, Concert Choir, College Chorus, College Band, Marching Band, Stage Band, Ensembles, Drama Productions, Speech & Debate, Business Club, Circle-K Club, Math/Science Club, Karate Club, Outing Club, Skiing Club, Spurs, Student Education Association, Letterman's Club, Cheerleading, Yearbook, Noon Needle, Student Government, Campus Christian Fellowship, Intervarsity, Mountain Aire, Fellowship of Christian Athletes, Newman Center, Rocky Road Scholars, plus cultural events in the Billings Community.

HOUSING

All single students not residing with relatives in Billings are required to live in college housing, unless a petition for off-campus accommodations has been approved by the Director of Student Services. Residence halls include Jorgenson Hall (male), Widenhouse Hall (coed), and Anderson Hall (female).

COSTS

Based on 1978-79 school year:

Tuition & Fees	$1950/yr.
Board and Room	$1260/yr
Books and Supplies	$ 180/yr

FINANCIAL ASSISTANCE

An average of 75% of the students at Rocky receive financial aid each year. Rocky administers four categories of aid: scholarships, loans, grants and work-study. Awards are made to admitted students on the basis of financial need, academic record, and talent areas. Federal funds used in aid awards include Basic Grant (BEOG), Supplemental Grant (SEOG), National Direct Student Loan (NDSL), work-study, and Guaranteed Student Loan.

Forms to complete:

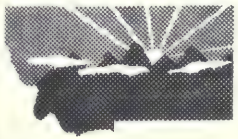
1. Financial Aid Form
2. Montana Application for Aid
3. Rocky Mountain College Scholarship Application.

ADMISSION PROCEDURES

1. Complete and return the application form with the $15 application fee.
2. Send at least one personal recommendation from an adult other than a relative, guidance counselor, or principal.
3. Send an official transcript of high school work to the college. A transcript may be submitted at the end of three years of high school work, with the understanding that admission is granted subject to receipt and approval of a transcript of the final year's work.
4. Send ACT or SAT scores (ACT preferred).
5. Admission at the end of the junior year is possible. Write to the Office of Admissions for information.

ADDRESS INQUIRIES TO:

The Director of Admissions
Rocky Mountain College
1511 Poly Drive
Billings, MT 59102
Phone: (406) 245-6151



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Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

WESTERN MONTANA COLLEGE

WESTERN MONTANA COLLEGE is located in Dillon, Montana, in the beautiful valley of Beaverhead County. The area is rich in historical interest and a center of mining and ranching activities. It is well known as a paradise for anglers and for hunters. The climate is mild with pleasant winters and delightful summers.

PROGRAMS

The College has for its primary purpose the instruction and training of teachers for the public schools of Montana. Western also offers advanced professional training and the Master's Degree in Education. Liberal Arts Degrees in English and in History are available. There are also one and two-year programs of general college and pre-professional curricula for those preparing for fields other than teaching.

Western Montana College provides students an opportunity to study:

- Vocational-Industrial Oriented Courses
- General College Courses
- Pre-Professional Courses
- Business and Secretarial Courses
- The Fifth Year Program for the Professional Certificate

Western Montana College offers the following degrees:

- Associate of Arts (2 year) in Business, Industrial Arts, Human Services
- Associate of Science (2 year)
- Bachelor of Arts in English
- Bachelor of Arts in History
- Bachelor of Science in Elementary Education (teach K-9)
- Bachelor of Science in Secondary Education (teach 7-12)
- Bachelor of Arts in Natural Heritage
- Bachelor of Science in Natural Heritage
- Master of Science in Education

STUDENT SERVICES

Many services are available to the students at Western Montana College including counseling and testing, registration and records, admission, health services, placement services and loans and scholarships. Students seeking employment after graduation are helped by the Placement Service.

STUDENT ACTIVITIES

Student extra-curricular activities include varsity and intramural athletics for both men and women, vocal and instrumental musical organizations, dramatics, forensics and publications. A great variety of special interest clubs, service organizations, departmental and professional clubs, honor societies and scholastic honoraries are open to students who are interested or who can meet the qualifications. Western participates in a full intercollegiate program as a member of the Frontier Conference of the N.A.I.A. The women's intercollegiate program is governed by the rules and regulations of the Montana Women's Intercollegiate Sports Association, which are consistent with the competitive policies of the Northwest College Women's Sports Association.

HOUSING

Residence Hall living and meals in the College's dining facilities are available. Single freshmen from outside Dillon must live and eat meals in residence unless other arrangements are approved through the office of the Dean of Students. Some married student housing is available.

COSTS

Based on the 1978-79 school year:

Fees:	In-state	$474.00
	Out-of-state	$1,482.00
Room and Board		$1,380.00

Textbooks are purchased by the student

FINANCIAL ASSISTANCE

Financial aid is available in the form of scholarships, loans, grants and work-study employment opportunities. Information may be obtained by writing to the Financial Aid Officer.

ADMISSION PROCEDURES

1. Complete and return application form with the $20.00 application fee.
2. File an official transcript of high school or college credits with the registrar.
3. Send ACT (American College Test) scores directly to the college if you have taken the test.
4. Send in a request to reserve campus housing.

ADDRESS INQUIRIES TO:

Director of Admissions
Western Montana College
Dillon, Montana 59725

Catalog requests:
Registrar
Western Montana College
Dillon, Montana 59725

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Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

MONTANA STATE UNIVERSITY

MONTANA STATE UNIVERSITY offers widely diversified curricula leading to bachelor's degrees in 45 fields covering some 124 separate majors, master's degrees in 34 different areas and doctorates in 19. The 1,170-acre campus, which consists of more than 40 major buildings, is situated on the outskirts of Bozeman, Montana.

PROGRAMS

Instruction at the University is administered through six colleges and two schools. The College of Engineering is the largest of these with approximately 18 percent of the enrollment; then the College of Letters and Science with 17 percent; School of Business with 12 percent; College of Arts and Architecture, and College of Agriculture each with 10 percent; School of Nursing with seven percent; and College of Graduate Studies with five percent. Although nearly one-quarter of Montana State University (MSU) graduates are recommended for teaching certification by the College of Education, only 10 percent of all students are actually enrolled in this college. Eleven percent of MSU students enroll in the General Studies Program.

STUDENT SERVICES

A variety of services are offered the student of Montana State University including admission, registration and records, health services, career placement and planning service, loans and scholarships, and counseling and testing.

MSU sponsors a High School Week program three days each spring for the benefit of junior and senior students in Montana high schools. Testing is conducted and scholarships are awarded to those students with the highest scores. In 1978, 940 delegates, representing 166 of Montana's 183 high schools, competed for $27,000 in scholarships. The program, emphasizing scholastic achievement and vocational guidance gives high school students the opportunity to see the State University in action, inspect buildings and facilities, become aquainted with students and faculty members and to participate in a bit of university life.

STUDENT ACTIVITIES

The intercollegiate athletic program for men and women includes basketball, track and cross country, skiing tennis, rifle marksmanship and rodeo. In addition, there is intercollegiate competition for women in gymnastics and volleyball, and for men, in football and wrestling. The University has a well-rounded intramural program for both men and women.

There are 12 performing music groups on campus involving nearly 600 student musicians. Participation is open to all qualified students.

Public speaking, oral interpretation, and debate attract many students. In addition to intercollegiate competition, a campus program is available.

The participation in writing and publishing a number of student publications is open to all qualified students.

The Theatre Arts program presents about seven major theatre productions each academic year.

HOUSING

Students may choose from one of the following options: coed halls, all men's halls, all women's halls, halls in which upperclassmen and freshmen are mixed, or halls in which freshmen live in one area.

The older, temporary married student housing is being replaced by newer, two and three-bedroom units. The new units are fully furnished including headbolt heaters and laundry facilities with utilities paid by the University. Also available to married students are houses and duplexes which are fully furnished but utilities and laundry facilities have to be provided by the occupants.

Applications for reservations of residence hall rooms or family housing units may be secured from the Director of On Campus Living.

COSTS

Estimate for 1979-80 school year, 12-18 credits

Resident Student Fees ($158.55 per quarter)	$ 558
Board and Double Room	1,650*
Books and Supplies (cost varies)	250
Miscellaneous (including transportation, clothing, recreation and health maintenance)	775
Total resident's expense	$3,233
Non-resident students add $456 per quarter	1,368
Total non-resident's expense	$4,601

*Plus laundry and social fees - approximately $15.

FINANCIAL ASSISTANCE

The primary purpose of the financial aid programs at Montana State University is to provide financial assistance to students who would be unable to pursue their education without such help. Although parents and students are expected to make a maximum effort to meet the cost of education, financial aid is available to fill the gap between family resources and yearly academic expenses.

To be eligible for consideration for federal, state and institutional financial assistance, an applicant must complete and submit a Financial Aid Form and a Montana Supplemental Information/Application Form. Applications should be filed by April 1. Late applications will be accepted and considered in the order received, subject to eligibility of the applicant.

ADMISSION PROCEDURES

Any qualified applicant will be accepted to MSU regardless of race, color, creed, sex, or national origin.

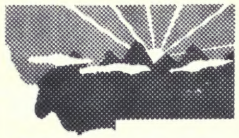
Graduates of any Montana high school which is fully accredited by the State Board of Education are admitted to regular standing. Montana residents who are graduates of non-Montana high schools which are fully accredited by a regular accrediting agency are admitted to regular standing.

High school students who are applying for admission must submit either SAT or ACT test scores as part of their application for admission. These scores may be included on the final eighth-semester transcript of high school grades.

Each application must be accompanied by a non-refundable $20 application fee. Montana Uniform Application forms may be secured from Montana high school principals or from the MSU Director of Admissions.

ADDRESS INQUIRIES TO:

Office of Admissions
Montana State University
Bozeman, Montana 59717



MONTANA VIEW

Vital Information for Education and Work
Department of Vocational and Occupational Services
Office of Public Instruction
Georgia Rice, Superintendent
Helena, Montana 59601

UNIVERSITY OF MONTANA

The UNIVERSITY OF MONTANA, located in Missoula, Montana, is a public, state-controlled, four-year co-educational institution supported primarily through biennial legislative appropriations and student fees. It operates on a tri-quarter system with an annual summer session, and is accredited by the Northwest Association of Secondary and Higher Schools and by appropriate professional and accrediting agencies.

PROGRAMS

For administrative purposes, various courses and curricula are organized within departments, schools, or colleges as shown below:

College of Arts and Sciences
Graduate School
School of Business Administration
School of Education
The School of Fine Arts
School of Forestry
School of Journalism
School of Law
School of Pharmacy

STUDENT SERVICES

A wide variety of support services are offered the student. These services include counseling and evaluation, health services (medical-dental), speech and hearing clinic, career planning and placement services, financial aids, campus recreation, study skills, reading clinic, academic advising, minority advising, foreign student advising, and handicapped advising.

Each of these areas are staffed by trained professionals committed and dedicated to providing the student with clinical, medical, and supportive services.

STUDENT ACTIVITIES

The University encourages a full and well-rounded program of activities designed to stimulate students' intellectual, vocational, social and recreational interests. Among the types of student extracurricular activities are student government, societies and clubs of students engaged in particular studies, professional and honorary organizations, athletic clubs or teams for men or women, student publications, musical organizations, church groups and residence hall groups.

HOUSING

Student housing includes eight Residence Halls, two housing areas for married students, and eight fraternity and six sorority houses.

More detailed information can be obtained by writing the Housing Office, University of Montana. For those students wishing information on fraternities and sororities, please write to Inter-Fraternity Council or Panhellenic respectively, University of Montana.

Off-campus information on housing may be obtained from the Student Action Center, UC Building, UM.

COSTS

Based upon the 1978-79 school year:

Fees: In-State	$ 613.50 per year
Out-of-State	1,981.50 per year
Board and Room	1,453.00 per year
Books and Supplies	300.00 per year

FINANCIAL ASSISTANCE

The University participates in the college scholarship service (CSS) Needs Analysis Program, which assists in determining the student's need for financial assistance. Undergraduate and graduate students are eligible for many types of financial aid. These include: Basic Educational Opportunity Grants; Supplemental Educational Opportunity Grants; College Work/Study Program; National Direct Student Loans; State Student Incentive Grants; General University Scholarships; Specific Scholarships granted by individual schools or departments.

For more information write to: FINANCIAL AIDES OFFICE, University of Montana, Missoula, MT 59812. High school counselors have financial aid applications and detailed information.

ADMISSION PROCEDURES

1. Complete and return the application form with the $20 application fee.

2. Freshman applicants may apply for admission anytime after they have completed their junior year in high school. In-state applicants are not required to submit a transcript of their high school record until they have graduated. Out-of-state applicants must have their high school send a transcript to the University at the time of application.

3. Transfer applicants (any applicant who has earned 12 or more quarter credits which will transfer to the University of Montana is considered a transfer student) may apply for admission any time within 12 months prior to their anticipated entrance into the University of Montana.

4. All required credentials should be on file in the Admissions Office by September 1 for admission to the autumn quarter, and one month prior to registration for the winter and spring quarters. Those whose complete credentials are not on file by these deadline dates may be required to register late and pay an additional late registration fee.

ADDRESS INQUIRIES TO:

Director of Admissions
University of Montana
Missoula, MT 59812
Phone: (406) 243-6266